

10/506513

```
1 ATGGTGTCTCT CCCAGGAGGA GCGGACTCC GCGCGGGGCA CGAGCGAGGC
51 GCAGCCGCTC GGGCCCCGCG CCACGGGGGC CGCTCGCGG CCCGGCCCGG
101 GACCCCTGGA CAGCCCGAG GCGGCTGTG AGAAGGTGA GGTGGAGCTG
151 GCGGGGCGG CGACCGCGA GCGCCATGAG CCCCCCGAAC CCCCCGAGGG
201 CGGCTGGGGC TGGCTGGTGA TGCTGGCGGC CATGTGGTGC AACGGGTGCG
251 TGTTCGGCAT CCAGAACGCT TGCGGGGTGC TCTTCGTGTC CATGCTGGAA
301 ACCTTCGGCT CCAAAGACGA TGACAAGATG GTCTTTAAGA CAGCAGCATG
351 GGTAGGTTCT CTCTCCATGG GGATGATTTT CTTTTCGTGC CCAATAGTCA
401 GCGCTTTCAC AGACCTATTT GGTGTGCGGA AAACAGCTGT CGTGGGTGCT
451 GCTGTTGGAT TTGTTGGGCT CATGTCCAGT TCTTTTGTA GTTCCATCGA
501 GCCTCTGTAC CTTACCTATG GAATCATATT TGCCCTGCGGC TGCTCCTTTG
551 CATACCGAGC TTCATTGGTC ATTTTGGGAC ACTATTTCAA GAAGGCGCTT
601 GGA CTGGTGA ATGGCATTGT CACTGCTGGC AGCAGTGTCT TCACAATCCT
651 GCTGCCTTTG CTCTTAAGGG TTCTGATTGA CAGCGTGGGC CTCCTTTACA
701 CATTGAGGGT GCTCTGCATC TTCATGTTTG TTCTCTTTCT GGCTGGCTTT
751 ACTTACCGAC CTCTTGCTAC CAGTACCAAA GATAAAGAGA GTGGAGGTAG
801 CGGATCCTCC CTCCTTTCCA GGAAAAAGTT CAGTCTCCA AAAAAAATTT
851 TCAATTTTGC CATCTTCAAG GTGACAGCTT ATGCAGTGTG GGCAGTTGGA
901 ATACCACTTG CACTTTTTCG ATACTTTGTG CCTTATGTT ACTTGATGAA
951 ACATGTAAAT GAAAGATTTC AAGATGAAAA AAATAAAGAG GTTGTCTCA
1001 TGTGCATTGG CGTCACITCA GGAGTTGGAC GACTGCTCTT TGGCCGATT
1051 GCAGATTATG TGCTGTGTGT GAAGAAGGTT TATCTACAGG TACTCTCCTT
1101 TTTCTTCATT GGTCTGATGT CCATGATGAT TCCTCTGTGT AGCATCTTTG
1151 GGGCCCTCAT TGCTGTGTGC CTCATCATGG GTCTCTTGA TGGATGCTTC
1201 ATTTCCATTA TGGCTCCCAT AGCCTTTGAG TTAGTTGGTG CCCAGGATGT
1251 CTCCCAAGCA ATTGGATTTC TGCTCGGATT CATGTCTATA CCCATGACTG
1301 TTGGCCACC CATTGCAGGG TTA CTCTGTG ACAAACTGGG CTCTATGAT
1351 GTGGCATTCT ACCTCGCTGG AGTCCCTCCC CTTATTGGAG GTGCTGTGCT
1401 TTGTTTTATC CCGTGGATCC ATAGTAAGAA GCAAAGAGAG ATCAGTAAAA
1451 CCACTGGAAA AGAAAAGATG GAGAAAATGT TGGAAAACCA GAACTCTCTG
1501 CTGTCAAGTT CATCTGGAAT GTTCAAGAAA GAATCTGACT CTATTATTTA
1551 A (SEQ ID NO: 1)
```

FEATURES:

Start Codon: 1

Stop Codon: 1549

FIGURE 1A

HOMOLOGOUS PROTEINS:

Top BLAST Hits:

Top 10 BLAST Hits:

Sequences producing significant alignments:				Score (bits)	E value
CRA 62000057354769	/altid=gi 14090278	/def=dbj BAB55595.1	(AB0...	874	0.0
CRA 18000004921871	/altid=gi 5730045	/def=ref NP_006508.1	(NM...	527	e-148
CRA 18000004921870	/altid=gi 7513431	/def=pir I38495	X-linked ...	527	e-148
CRA 18000005134802	/altid=gi 6677997	/def=ref NP_033223.1	(NM...	516	e-144
CRA 163000000492387	/altid=gi 8923981	/def=ref NP_061063.1	(NM...	402	e-110
CRA 224000009228679	/altid=gi 17389922	/def=gb AAH17968.1	AAH17...	399	e-109
CRA 89000000201355	/altid=gi 7299667	/def=gb AAF54851.1	(AE003...	353	1e-95
CRA 224000007378350	/altid=gi 16768034	/def=gb AAL28236.1	(AY0...	353	1e-95
CRA 18000005086356	/altid=gi 7449989	/def=pir JC5507	monocarbo...	189	2e-46
CRA 18000005075554	/altid=gi 6226943	/def=sp Q90632	MOT3_CHICK ...	188	4e-46

EST:

CRA Number	gi Number	Score	Expect
CRA 76000044050113	gi 14568965	1265 bits (638)	0.0
CRA 1000600799987	gi 6359768	1170 bits (590)	0.0
CRA 160000129712648	gi 13709362	1063 bits (536)	0.0
CRA 58000099006260	gi 12788094	1049 bits (529)	0.0
CRA 32000087643803	gi 10813242	1017 bits (513)	0.0
CRA 157000141043600	gi 13460082	973 bits (491)	0.0
CRA 160000129843301	gi 13720697	902 bits (455)	0.0
CRA 105000016327758	gi 11084182	680 bits (343)	0.0
CRA 330000005235303	gi 6989741	551 bits (278)	1e-154
CRA 3000001439560	gi 1166011	547 bits (276)	1e-153
CRA 1000684940123	gi 6569405	486 bits (245)	1e-134
CRA 1000610791502	gi 5933739	486 bits (245)	1e-134
CRA 3000001441088	gi 1164256	462 bits (233)	1e-127
CRA 160000129872523	gi 13723263	410 bits (207)	1e-112
CRA 162000043366421	gi 10877364	234 bits (118)	8e-59
CRA 3000000874607	gi 2994619	218 bits (110)	5e-54
CRA 225000013398008	gi 18086759	208 bits (105)	4e-51

EXPRESSION INFORMATION FOR MODULATORY USE:

Library source:

gi Number	Organ	Tissue Type
gi 14568965	lung	small cell carcinoma
gi 6359768	(none)	liver
gi 13709362	(none)	(none)
gi 12788094	brain	neuroblastoma cells
gi 10813242	(none)	pooled germ cell tumors
gi 13460082	prostate	adenocarcinoma
gi 13720697	(none)	(none)
gi 11084182	ovary	fibrotheoma
gi 6989741	(none)	(none)
gi 1166011	placenta	(none)
gi 6569405	(none)	pooled germ cell tumors
gi 5933739	thymus, pooled	(none)
gi 1164256	placenta	(none)
gi 13723263	(none)	(none)
gi 10877364	colon	(none)
gi 2994619	pooled	(none)
gi 18086759	Pancreas	Islets of Langerhans

FIGURE 1B

1 MVLSEQEEDS ARGTSQAQPL GPAPTGAAPP PGPGPSDSPE AAVEKVEVEL
 51 AGPATAEPHE PPEPPEGWNG WLVMLAAMWC NGSVFGIQNA CGVLFVSMLE
 101 TFGSKDDDKM VFKAAWGGS LSMGMIFQCC PIVSVFTDLF GCRKTAVVGA
 151 AVGFVGLMSS SFVSSIEPLY LTYGIIFACG CSFAYQPSLV ILGHYFKKRL
 201 GLVNGEIVTAG SSVFTILLPL LLRVLIDSVG LFYTLRVLCI RMFVLFLAGF
 251 TYRPLATSTK DKESGGSGSS LFSRKKFSPK KKIIFNFAIFK VTAYAWWAVG
 301 IPLALFGYFV PYVHLMKHMN ERFQDEKNKE WLMCIQVTS GVGRLLFGRI
 351 ADYVPGVKKV YLQMLSFFFI GLMSMMIPLC SIFGALIAVC LTMGLFDGCF
 401 ISIMAPIAFE LVGAQDVSA IGFLLGFMIS PMTVGPPIAG LLRDKLGSYD
 451 VAFYLAGVPP LIGGAVLCFI PWIHSKKQRE ISKTTGKEKM EKMLENQNSL
 501 LSSSSGMFKK ESDSII (SEQ ID NO: 2)

FEATURES:

Functional domains and key regions:

PDOC00001 PS00001 ASN_GLYCOSYLATION

N-glycosylation site

81-84 NGSV

PDOC00002 PS00002 GLYCOSAMINOGLYCAN

Glycosaminoglycan attachment site

340-343 SGVG

PDOC00004 PS00004 CAMP_PHOSPHO_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site

Number of matches: 2

1 275-278 KKFS

2 509-512 KKES

PDOC00005 PS00005 PKC_PHOSPHO_SITE

Protein kinase C phosphorylation site

Number of matches: 7

1 10-12 SAR

2 234-236 TLR

3 251-253 TYR

4 258-260 STK

5 273-275 SRK

6 475-477 SKK

7 485-487 TGK

PDOC00006 PS00006 CK2_PHOSPHO_SITE

Casein kinase II phosphorylation site

Number of matches: 6

1 4-7 SQEE

2 97-100 SMLE

3 104-107 SKDD

4 164-167 SSIE

5 258-261 STKD

6 485-488 TGKE

PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 15

1 13-18 GTSEAQ

2 82-87 GSVFGI

3 141-146 GCRKTA

4 149-154 GAAVGF

5 156-161 GLMSSS

6 174-179 GLIIFAC

7 180-185 GCSFAY

8 201-206 GLVNGI

9 230-235 GLFYTL

10 265-270 GSGSGS

11 300-305 GIPLAL

12 337-342 GVTSGV

13 384-389 GALIAV

14 394-399 GLFDGC

15 464-469 GAVLCF

FIGURE 2A

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PDOC00013 PS00013 PROKAR_LIPOPROTEIN
Prokaryotic membrane lipoprotein lipid attachment site
169-179 LYLTYGIIFAC

PDOC00029 PS00029 LEUCINE_ZIPPER
Leucine zipper pattern
365-386 LSFFFIGLMSMIPLCSIFGAL

PDOC00240 PS00267 TACHYKININ
Tachykinin family signature
Number of matches: 2
1 154-158 FVGLM
2 369-373 FIGLM

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	67	87	1.683	Certain
2	117	137	2.220	Certain
3	146	166	1.923	Certain
4	169	189	1.494	Certain
5	202	222	1.761	Certain
6	232	252	1.893	Certain
7	291	311	1.874	Certain
8	330	350	0.801	Putative
9	364	384	2.458	Certain
10	387	407	1.707	Certain
11	419	439	1.966	Certain
12	453	473	1.826	Certain

BLAST Alignment to Top Hit:

>CRA|62000057354769 /altid=gi|14090278 /def=dbj|BAB55595.1| (AB047324)
TAT1 [Rattus norvegicus] /org=Rattus norvegicus
/taxon=10116 /div=ROD /dataset=nraa /length=514
Length = 514

Score = 874 bits (2233), Expect = 0.0

Identities = 435/517 (84%), Positives = 463/517 (89%), Gaps = 1/517 (0%)

Frame = +1

Query: 232 M L S Q E E P D S A - R G T S E A Q P L G P A P T G A A P P P G P S D S P E A A V E K V E V E L A G P A T A E P H 408
M V S E E P + A R T + E A Q P G P A P + A P P G P S D + + V E K V E V E L +
Sbjct: 1 M V P S L E E P A A A E R T N E A Q P G P A P S D D A P L P V P G P S D V S D G S V E K V E V E L T -- R S T G N Q 58

Query: 409 E P P E P E G G W G L V M L A A M W N G S V F G I Q N A C G V L F V S M L E T F G S K D D D K M V F K T A A W V G 588
E P P E P E G G W G L V M L A A M W N G S V F G I Q N A G V L F V S M L E T F G + K D D D M F K A A W V G
Sbjct: 59 E P P E P E G G W G L V M L A A M W N G S V F G I Q N A Y G V L F V S M L E T F G A K D D D N M A F K - A A W V G 117

Query: 589 S L S M G M I F F C C P I V S V F T D L F G C R K T A W G A A V G F V G L M S S S F V S S I E P L Y L T Y G I I F A C 768
S L S M G M I F F C C P I V S V F T D + F G C R + T A V + G A A V G F V G L M S S S F V S S I E P L Y T Y G + + F A C
Sbjct: 118 S L S M G M I F F C C P I V S V F T D M F G C R R T A V L G A A V G F V G L M S S S F V S S I E P L Y F T Y G W F A C 177

Query: 769 G C S F A Y Q P S L V I L G H Y F K K R L G L V N G I V T A G S S V F T I L L P L L R V L I D S V G L F Y T L R V L C 948
G C S F A Y Q P S L V I L G H Y F K K R L G L V N G I V T A G S S V F T I L L P L L L L + V G L Y T L R + L C
Sbjct: 178 G C S F A Y Q P S L V I L G H Y F K K R L G L V N G I V T A G S S V F T I L L P L L L G N L T S V G L C Y T L R I L C 237

Query: 949 I R F M V L F L A G F T Y R P L A T S T K D K E S G G S S L F S R K K F S P P K K I F N F A I F K V T A Y A W A V 1128
I R F M V L F L A G F T Y R P L S + K + K E S S S S F S R + K S P P K K I F N F A + F K T A Y A W A
Sbjct: 238 I R F M V L F L A G F T Y R P L V P S S K E K E S D S R S S F S R R K L S P P K K I F N F A L F K E T A Y A W A A 297

Query: 1129 G I P L A L F G Y F V P Y V H L M K H M N E R F Q D E K N K E V L M C I G V T S G V G R L L F G R I A D Y V P G V K K 1308
G I P L A L F G Y F V P Y V H L M H V E R F + D N K E V + M C I G V T S G V G R L L F G R I A D Y + P G V K K
Sbjct: 298 G I P L A L F G Y F V P Y V H L M N H V K E R F K D M N K E V L M C I G V T S G V G R L L F G R I A D Y L P G V K K 357

Query: 1309 V Y L Q M L S F F F I G L M S M I P L C S I F G A L I A V C L I M G L F D G C F I S I M A P I A F E L V G A Q D V S Q 1488
V Y L Q M L S F F F I G L S M I P L C S + F G A L I A + C L I M G L F D G C F I S I M A P I A F E L V G Q D S Q

FIGURE 2B

WO 03/076644

5/65

PCT/US03/06667

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Sbjct: 358 VYLQVLSFFFIGLTSMIPLCSVFALIALCLIMGLFDGCFISIMAPIAFELVGPQASQ 417

Query: 1489 AIGFLLGFMSIPMTVGPPITAGLLRDKLGSYDVAFYLAGVPPLIGGAVLCFIPWIHKKQR 1668

AIGFLLGFMSIPMTVGPP+AGLL DKLGSYD+AFYLAG+PP IGGAVLC IPWIHKKQR

Sbjct: 418 AIGFLLGFMSIPMTVGPPVAGLLHDKLGSYDLAFYLAGIPPFIGGAVLCIPWIHKKQR 477

Query: 1669 EISKTTGKEKMEKMLENQNSLLSSSSGMFKKESDSII 1779

EISK TG EKMEKML NQ+SLLSSSSG+FKKESDSII

Sbjct: 478 EISKNTGGKEKMEKMLANQSSLLSSSSGIFKKESDSII 514 (SEQ ID NO : 4)

Hmer search results (Pfam):

Model	Description	Score	E-value	N
PF00664	ABC transporter transmembrane region.	4.2	7.1	1
PF01027	Uncharacterized protein family	3.4	7.6	1
PF00083	Sugar (and other) transporter	2.0	7.4	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00083	1/1	11	50 ..	184	223 ..	2.0	7.4
PF01027	1/1	121	177 ..	1	59 [.]	3.4	7.6
PF00664	1/1	165	232 ..	1	76 [.]	4.2	7.1

FIGURE 2C

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1  AATGGGTATT TTGTAGACTG TCCTTGATTG GGATTGTGCT AATGTTTTTC
51  TGATGGTTAG CCAGGGATTA TGGGTTTTGG CAGGAAGACC ACAGAGGTAA
101 AGTACCATTT TCATCACATC ATATCGGGGA TACATTATCA TCTAGTTGAG
151 GTA CTGTGTG CCATTTTTTG CACCCTAAAG TTATTCTTTC CCCCCACTCC
201 CCCTTTCCAT CCTATACTCT TTGGAAGAAA GTTACTACGC ATACCCACAC
251 TTAAGAGTA AACCATTGTA CTTACCTCC ATGAGGGAGG GAGTATGTTT
301 ATAAAGTATT TACATTTCTT GCAGGAGAGA TTTGTCTATT CTCTCCTCAT
351 TATTTATTTA ATCATTFACT TACATCAGTA CTGACTCGTG GATAATTCTT
401 ACATATGTGT TTGTTTGTGT GCATGCAAAT ATATAATCGA TGTGCTTTCT
451 TTGCCAATA ATATGTTGTG GACAACCTTC AAAGTCAATA AATACAGATG
501 ACCTTCAGAA CTTTATAGAGG TTTTAAAGTA AGTATCTAAT CAGTCTTCTA
551 CCAATGTACA TTATACTTCC AAATTTTCTT TATTTCCAAC AATACTGGGG
601 TATCATCTTC ATACATACAT TTTTGTGCAC TTATGTGCCT ATTCCTTTGT
651 TTA CTATTTT ACCCTCATTT CTAAGGCAGA TTACACTTGA GCTATGTTCC
701 CCATTCACAC ACCAAGCAGG GCTTGCTTTC CTTAGTTTAT GCTATTTTCT
751 CTACCTGGAA TGCTCTTTTC CTGTCTTGAC CCAGTGAAGT CGTATGTATG
801 AATCAGGGCT TCGGCCAAAG GCTGTTTGCT GTAGAGGCTC TTCTACAGTG
851 TTTGGAGAGA ATTTAAGGGA CTATCTCATC TCTCTCTTTT GTACATGTAT
901 TATAACACAT CATCTGAGCC TCCTAGTCTC TCCCAGGACT CTTTTTCTCT
951 ACCAGTTTAT CAACGTATAA GAGGCAGAAA CGAGATCAAT CGCACTCATC
1001 TGTGTACTCT ATCAGAGTGG TGGGCACATC AAGTAACTAG CATATTTTGA
1051 CTTTGATTGA AGTGAAGAAT ACGAATAACA GAAATTAAGA AGCATCCTCA
1101 ATATTGCATA GCAGGTTACT CTTCTTTTCT TTTACATAGG ATGGCACTCC
1151 ATGCTTCAGG GAGACAGAGG AGTTGAATAC AGGTTTTAGT TTTTGTATAA
1201 AGTGA AAAAG ACTCTGATGT AGTTGAAAAG TAATGCTTTC TAGCTGTCTG
1251 TTA AAAAATGT TTGTGGTTG AAGACTTCGG AATTGCAGTC CAGTGAGGAC
1301 TGA AAAA TAAG CATCTTTGGT GTGCCAATA TTCATAAGGA AATTGTATAC
1351 GAATGCAAGA GAATGGAAC GAAGTAATAA AATAAGGGCT CTGATCCTTC
1401 AGATGACTTA TTTAAGAAAG CAGGTGGCAT AACGAATCTT ACATATTATA
1451 ATTAGTACTG AGAGGTGAAT GCCAAAACAT AAAACAAACA CAATCGAGAC
1501 AATGTTAGTG TGACTGTGAC GCTGTGTGCG TGAGTTGAGG CTAACGATCC
1551 AGTGTGGCTC TCCTGAAGGC CCACCGCGCC CGCACCTAGG AGACGGCGCC
1601 CTTCTGCTCA TGCTTTGAGG CGGGGTGACC CACACATCTG TGCCCCCTCT
1651 TGAGCAGGAG GAGGCCCGGT CGCAGACGCG CGCGCAGACA GCGTCTGCGG
1701 CGGGCACCTG GGGCGCGCG CGCGGGGCGG CCGCGCTCCG GCTCTCCGAG
1751 GCCCAATCAT CTGGAGGCTG TGGGGGCACG TCCCGCTCCC GGCCACGGCC
1801 CCAGCGGGCG GGGCGGGGGG TGCTTTTAAG AACCGCGCGC TGGCAGTGGG
1851 CTCAGTCGGG GGTGCGGGGC TGTGACCTAG AGGCTTCAGT GTCGATCCCC
1901 GAGGTGTTGG CGCGCGCCAG CTGTCTCGC GCGCGCTGCG GCGCTGCGCG
1951 CCGTGGCGCT GCCAGCCCGC CCGCCCGCCA GGGGCTCCG CGCCCTCGCC
2001 TCGGCCTCGT TAGCCCGCCA GGAGCCCGCG AGCTCTCCG GGAGCCCGCT
2051 GGTAACTCGC GTCCCTCGCG CTTCTCCGGC GCCTGAGGGG CCGCGCTCGG
2101 GCCATGGTGC TCTCCAGGA GGAGCCGGAC TCCGCGCGGG GCACGAGCGA
2151 GCGCGAGCG CTGCGCCCGG CGCCACGGG GCGCGCTCCG CCGCCCGGCC
2201 CCGGACCCCT GGACAGCCCG GAGGCGGCTG TCGAGAAGGT GGAGGTGGAG
2251 CTGGCGGGGC CGGCGACCGG GGAGCCCGAT GAGCCCGCG AACCCCGCA
2301 GGGCGGCTCG GGCTGGCTGG TGATGCTGGC GGCCATGTGG TGCACCGGGT
2351 CGGTGTTCCG CATCCAGAAC GCTTGCGGGG TGCTCTTCTG GTCCATGCTG
2401 GAAACCTTCG CCTCCAAAGA CGATGACAAG ATGGTCTTTA AGACAGGTGA
2451 GCGCGCGCGC GCGCGAGGC CAGCCTGGGC GACCCGCGTG GGGCCCCCGA
2501 GCGCATCCCG CGTGTGGGCT GTGTCTGCT CCGAGTGTGC ATGTGCGTGG
2551 GTCCCTGTGC CAGAGGGTGC GAGCAGGGGG GTCTTTGAG TTGCAGACAG
2601 AGCCTGCGCG TCTGGGGGCC TCGGGGTGCC CGTCTTTATA TGGAACTCAG
2651 CTGCAGAGCT GTGTGTTTGC AAGCAGGTGC CAGAACTTAC TTGCCGAGAT
2701 CGTCTCTCTT TCCCTCAGC AGAGCAGACG CTAACAGTCC ACAGGAGCCC
2751 TTCCTTTTAT TGTTTGAAAA CAAACAGAAC CCCAGAACCT TCAACCCAG
2801 TCATCGCCCT GTCATTTTTG TGGTCTCTTT CGTGA CTATG CCAGTTATGT
2851 AGTTCCTTAC CTGCCCTCC CTGGCTTTGG AGGAATGAAA GAGATTTGTA CGAAGGTCAC
2901 GGGCGGGGGG TTGAGTTTGG AGGAATGAAA GAGATTTGTA CGAAGGTCAC
2951 TGGAGTTCCA AAGGGGGGCC TGCAAGAGTC ACGGTTCCGT GCGTTCCCGT
3001 CCCCCCGCCT TTTTTTGCCC TCTGGGTTAA ATGTAGAAAA CACGGGAGGC
3051 AGCCGGATTA GGGACTAGGA TGAGGAAGGT GAAGGGTTGC TTTCTCCCTC
3101 TTCCTGTGT GTTTTTTGTG ATTTTTTTTT AACCATATAG TAAATTAGAT
3151 ACAAAGGTG CAGATTACAG GTTTTCTCCC TGTAGAGCAT TATTATGACT
3201 TTTTGGCTGG TTAGGCAAAA AACAAATCTA AGACCTTCTG CATGACACTT
3251 TAACATAAAT TCTTTCACTT TATCCTGCAA GGTGAGCGCG GTCAACCCCA
3301 TTTGGGTGAG AAAACTGTAG CTCAGTGAAA GTGTCTTGGT GGGTAGTAGA
3351 ATGCAATAA AACACATATC AACTGACTTC AAGGGCTAAG TGATTTCCAT

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FIGURE 3-1

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3401 TACTAAATCA ACCTCCCTCC CCATCATTTG GGGTAACTTT ATATGATTAA
3451 TAGTCTTTTT TTTTAACTTT GATTTTCTAT TATTTTATGA GTGAATATTT
3501 CTTAGGTCTT TAGTATGTCAT ATGAGGAATG GGCAAGACTG TAATAAATTC
3551 TGAGACAAAG GTAATGCTGG GTTATGCTGA GAGTTTTTAA ACCTGACATA
3601 AATACTATTA AACTATTTGT ATCATTCTGC AACTTACTTT TCTTCCATTG
3651 CGCATCATGT TTGTGACTTA TCCACATAAT ACCTCAGTGT GAACTGATAA
3701 CTCAAATTC TCCATTTTA ACTTAGGTGG TTTGCATTGT TTGACTATAT
3751 TATACTCTAT GCATTCTCCC TCTGATGGGC ATTTAGATTG CTTCCAAACT
3801 CATTTCAAAC AATGCTGCAA TGAATATTCT TGTACACTCT CGTTATGCAT
3851 GTGAATACGG TACCATTTTA ACCTGGAATT TCTGTTCTTT AAATAGCTAT
3901 TGAACTGCT GTGGTATGCG GGTCAATGGG CTAGGTACAA AAAGTGTAA
3951 AAATGTAGTA ACATATCCTT ACCATTTAAG GGAAGTAATC ATTGTAAAGT
4001 TTAGCAGGGG AGATATGTCAT ATATAATAGC AAACAAAAAT AGTTTGTGT
4051 CTTTTCTATA TGAGTATTGG GTGTCAGAGA GAAAAGCCCC AAAAGAAGGC
4101 AGAATTGACA GAGTTAACAT TTAAAGACTA GTTCCAACAT TTACCATATT
4151 CCTGCCTGGG ATTACAGATT TTTTAATGCA GTCAAGATAA CAGCAGTCTT
4201 TTGTTTATCA TTGTTTTTGC AAATTCAGTT AAGTAGATCC TTTGGTGTCT
4251 GTGGGTGGGT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTGAG
4301 AGAGAGAGAG AGCAATTGCC AGAGAGACCA TAGCTTTGCC AGGGATGAGA
4351 ATTTTGCACT GTCAAAGTCT CTACCTACTA CTTGTCCCCA AAGTTCTAAT
4401 TGGCTACACA ATATCCCAAT ACTGGGTAGC TGAGAGTGAG GGAAGGAAAC
4451 TGGTTTTTCT TTTGCACTCT GTGGAACCTT GTGTTTTCCA TTTTGATGAA
4501 TATCTTTTTT CTTTTTACTC AGTTCAGTCT TTGACAACTT TTTTCACTCAT
4551 GTTTGTGTAT ATATCATATA AACAGTTGCA CAGGTGTGCT CAGGTGTGCT
4601 AGTTAAATGT GTGAAGATCT TTGTGTTTCT CTGCTGACT GCTGTATATC
4651 TATTTATGGT TGTGCCATTG CACAAGGGTG CCCAACTCAG GGGTAAGTGG
4701 GGACTGAAAA CCAGCCTGGG CTCTGGGTGC CCTTTGTCTG ATTCCTACAG
4751 AAGGGCCCTA TGCACCTGTA ATGGCCCTGT ATAACACAGC ATCTAGATTG
4801 AACAAATGGC ATTACTTGGG TGCTAGGTAA TACATATATG ACTGATAGAT
4851 GTTAAGGGCT GAGGAAGAAA ACAGATTTAA ACTTAGTGCT GAAAAAATGG
4901 TTACAAGATA GTCTTTAAGC CAGTTATTGT TGAGATCTCT CTCTCTTCCC
4951 CTGTCCCTA CCCCCTTCTC TTTCTTCTAG TGCACACACA CACACACAAA
5001 GGTGTTTCTT GAAGTCCCTC ATCTACCACA GTCACCTGTA TTTGAGAATA
5051 TCTGCTTTGA AGTTTGATTG GTCACTCTTT TTTCACTTTGA TATTCGAATG
5101 CTGAGTCGTC TGTGATCAAG CATATGCAAG CTTCAAATAC ATGCCAAAAA
5151 ATATCTGGAA TTTGTTTAAG CCTTTTATTT TTCAAAGTTT TGGTCTATTT
5201 TCTATTACCG TACTCATGAT GGATAATCCT GGTGTTAGAG TACAGCTAGT
5251 TCTGTCTCCT TGTTCATTT ACTTCTTTAT AGCAAGTGAC TAGCCTAAGG
5301 ATATACAGGG AGGTGGTGGT GGAATGGAAT CTAGGTCTCC AAATGATGGT
5351 GCGCATTTCT TGAGTACTTT CCTGTGGCTA AGCACTTTAG ATGCGTTTCT
5401 ATTTAAACCT TACCAGGATT CTCTGATAGA CTTTGTAAAT ATCTTTCTTT
5451 TCAGATATGG GAAGTCAGGC TTACAGAGTT TAAGTAAGAA GTGGAGCCAG
5501 AATTCAACCC CAGGCTTATC TGACTCTAAG AGCTGGGATT TTTATTTTAA
5551 TTATTTATTT ATTTAAAAA TGGAATGCTT CATGAATTTG CATGTCATCC
5601 TTGTTTCAAGG GTCACGCTAA TCTTCTCTGT GTCAATCCAA TTTTAGTAGA
5651 TTGTTGTTCA AAGTGCTGCT GAAGCAAGCA CCAGGAGCTG GGTTTTAAATC
5701 ATTCATATA TTGCATTGAC TAGATAACAT TCTGCAAATA CGATGTTTTT
5751 TATGTTGTTG ATTAATTTAA GTGTTAGTGA TTGGTTGAGT GCTCTACCAT
5801 GCATTCTGGG ATTAGAAAGA AGGGTCCCTG TTTCTTGGTC CTACTTTGTG
5851 GTGAATAAAC AATTGCAAAT TATTAATGTC TCAAACATA TTTCTGAAGT
5901 GTAGAGAGAG TTCCATAGAA GAACAAGATA CTTCCATATG CCGTTCAAGC
5951 AAAAGTCTGG GGTTCCTTTT GAAGAAGTCT TAGATTGATC CACAGCAGGA
6001 CAATGTTTCT AGGCAGAACT GAGGAGGAGC CTTTCTTAGG CTCACCTCTC
6051 TTCAGGGCTC TGTTAACTCT TCCCACGCAA TGGATAATCT ACCCAAAATT
6101 TCTCAGGAAA GGGCTGAAG AAGTTCATTG ACCTAAGGT GTAAAGTGAGT
6151 TTACACATCT TACTGTTAAT TCTCTTTATA CAAATGTTTA CCAAGTTATC
6201 TAACACGCTT TGTTTTGGGC TCTGTCTTGG GGAAGTGGGA TAATGACTGA
6251 GAGAGAAAAT GTCAGCTGTT TCAAAGTAGC TTAGGATCTG TTGTGGGATA
6301 CAAATTAATA ACAGACCAGA AGTAATAGAA TATTTCCCTG AAGGATTTTC
6351 AATAAACAG GACTCAGTTT TACTATAAAA GGCTGAAATT CTAAGGTCAT
6401 TTCAACAGGT GGTGGGTTG GGGGTGGGGA AGGCATTTGA CGCCTCTTTC
6451 TCTATGGTTA TAAATCTCAC TTGGTGAAAT TAAGACTTTG GAAAGGGGAA
6501 GTAAGCCAAC TCCAAGTTGG GCAGTAGAAC CAATGAAAAA TGCTGACGGC
6551 ATCAGAGTCC CATTATGGTG CCCAGCTGCC AATGACATGG CACTCAGAGG
6601 AGTGTCTCAC ACATACTGCT CTGTCTGAGG GAGCAAGCTA AGCTTGAGTT
6651 GTCTCTTTTT TTGTTGTTTT TTTTTTTTTT TTTTTTTTTG GACAGATTCT
6701 CACTCTGTGG CCCAGGCTGG AGTGCAAGTG CACCATCTGG GCTCACTGCA
6751 ACCACTGCCT CCCGGATGCA AGCAATTCTG CCTCAGCCTT CCGAGTAGCT

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FIGURE 3-2

6801 GGACTACCTG CGCTTGCCAC CACACCTGGC TAATTTTTGT ATTTTTAGTA
6851 GAGACAGGGT TTCACCATAT TGGCCAGGCT GGTCTCAAAC TCCTGACCTC
6901 GTGATCCACC TGCTCGGCT TCCCAAAGTG CTGGGATTAC AGGCATAAGC
6951 CACCGCGCCT GGCCAAGTTG TCTCTTTTGA GTTGAAATTT TACCTGTTCA
7001 CATGTGTATT CTTCCTGCCT AGGTAGAGAG GAATCAGACA CTCTGGGGAA
7051 GAATACAAAG AAATACAATT AAGTGAACA TTGTTTTTCT TTAGAAAGTG
7101 CAATTTTGGG CTGGGCGCAG TGGCTCATEC CTGTAATCCC AGCCCTTTGG
7151 GAGGCCAAGG CAGGTGGATC ACCTGAGGTC AGGAGTTTGA GACCAGCCTG
7201 GCCAAGATGG TGAACCCCG TTTCTACTAA AAATACAAAA AATTAGCTGG
7251 GCATGGTGGC GGATGCGTGT AATCCAGCT ATTCGGGAGG CTGAGGCAGG
7301 AGAATTGCTT GAACTGCGA GGCAGAGGTT GTAGTGAGCC AAGATGGCGC
7351 CACTGTACTC CAGCATGGGC AACAAGAGTG AAACCTCGTC TCAAAAAAAA
7401 AAAAAAGAAA AGAAAAAAG AAAAAAGAAA GAGCAACTTT GTTTAACTC
7451 TGCTAGATAC TGGAAAAACC ATGGAACATA TGAAGAGCCT AGGGCTTTTT
7501 ATTTGTTTTG AGATTGTGCC ATTTCACTCC AGCCTGGGCA ACAAGAGAGA
7551 AACTTTGTCT CACACACAAA AAAAGTGTA ATCAAAACAT TAAAAATTAA
7601 GTAGTTTGGG AGTAGATTAT CAAAAAGGTC CTGAAAGGGA GGTTCTTTGG
7651 CTATAATCTT TAACGCAACT CTACACTCCC TGTATGGAGA CAGATTTCTT
7701 TTTAGATGGT TACAGTCACA AAGTAGGGTT TTCAGTAGCA TTTAGGGATG
7751 AATGAATCTT GCAGCACTC TCATGTATC TTGCTAGCCC CTCTGAACT
7801 TCAGGTCAGT TAGTGCTTCC TCAGAAATTG TTCCCCCAC ACCAAGTTTT
7851 CACATTTACA GTTATACTGA TATCCACATT GTACTGTTGT ATGTGACACC
7901 TAGATTATAG GAAATTTTGG CTATAGTTCA GAAATTAAC TCTATGTTTT
7951 GCCTTTACGC TAAAGAGATT TTGTTTTGTT TAGTAGGAAA AGCGGCCTGC
8001 ATAAGTAGCT ATTTCTGTAT CTTAGAAAAA TTTTATAGTA CAGTCTTTTG
8051 TTAGGCTAGT TACAGTGAAC AAATAATCTG GTTCATGGTC CTATACATCT
8101 TTAATAATAA GAAAAATACC TGATTGTTAT TTACTCTGGA AGAGAGGTAG
8151 AAAAGCTAAG AGAACTCACT TATGGCAATA AACCAATCTA AACTACCTGC
8201 TAAAAAAGT GAGAAGATTA TAAAAATGGT TCTAGGATTT TGAATAATA
8251 GTGAGTATGG TATGGGCGTT TCATACTTCA TTTCCAGAA GTTTCTGGAT
8301 TAAGTGGGAG ACTGAATAGC ATATATAGTG AATTCTAATT AAATACAACA
8351 ATGTGAGATT CCTGTGGTGT TTTTTCATGG AATTAAAAAT TAATAATTTT
8401 AATAAAATTA ACTGCTGAAA GAACCCAATT AGCCAAAATG AAAAGCATAA
8451 CACATTTTTT CAGGAGCGAT TTTGAGGTGT CTTTATAGAT AAATTGTAAT
8501 CTGCTTTTGA TGTGATTTGC TACATCTTTT TGTTCAGTT CCTTGAGGCT
8551 CAGCCCTGGC CCATATACTT GCTTCACTTT TCCTGCTTTC TTCCATCCAC
8601 TGTCTTGGGG CTGTTATTTT CAAATCTCAT CACTGTGTTT AAGACTTATT
8651 TACTATTTCT GGACAGTTCC ATTTGGGTAC ACAGGTACAT CATACTAAAC
8701 TAACATGAAC TCATTTTTCA GCTACACCAT ACAACCTTCC CTTACTACCA
8751 AAAATGACAG CCATTTGTGC GGCAATCTTC TGAATCCATA TTCTCTCTTC
8801 TTAATTTCTT GTGCATGATA CCTCTGGTTG TTTAAGTCAG AAACCTGGAA
8851 TGTATCTTAG CTCTTATTTT CTCTTCTTTC CTTACTGTT TTGTTAAATC
8901 AGAGTTCTTT TGTGTTTACC TTCTTAATGC CTCATAAATC AGTCCCACTT
8951 TTCTTTTCACT ACTGTGCTTT AATTCATGCC TTCATTTACT TTTTATTTTA
9001 TTTTTTGGGA TAGGGCCTCA CTGTGTTCCC CAGGCTGGAG TGCAGTGGCA
9051 TGATCATAGC TCACTGCAGC CTCAAACTTC TAAGCTCAAG CAATCTCTCT
9101 ATCTCAGCTT TTTGAGTAGC TGCAACACCA GGCACATGCC ACCATGGGCG
9151 GCTAATTAAG AAAAATTTTT ATGTGGAGAT GGCATCTTGC TATTTTGCTC
9201 AGCCTTTGCT TGAACCTCTG GCCTCAAGCG ACCCTCTCTG CTCAACTTCC
9251 CAAAGTGTGT GGACTACAGG CGGGACCTAC TGTGCTGGC CACCTTCATT
9301 ACTATTGGCA ACAATTAGTC ATAACCCCTT AACAGGATTG CTGTCTCTCA
9351 GTTGTACATC TGAGTGATTT TTCTAAAAGA TTGGACCATA TGATTTTTCT
9401 GTTTAAATGC CCAGTGACAC TCATTACTTT TAGGAAAAAT TCAAACTCCC
9451 TACTCGAAGG GCTGCAAGC TCTGGCCCTT GCCTGGCCCT CTAGCCTTGC
9501 CCCTGCTTCT CTCCCTTACT GGTCTTTGTG TTCTAGCCAA CCTGTAGGTG
9551 TTACACTGGC CCAAATTTGT CTGTCTGCTT TTTGCTCTG TACCTTTGTG
9601 TGTGCCACTC CTGTCTTCAG TGGATGGTT GGTCTCTGTG AGATTCTGAT
9651 GAAATGGTTG GCCATTTTAT TCTTATGTCA CAATCTGGG ACACAAACAG
9701 TGATTTTATG CAATTGTTAT GTATTTGATG CACTTGAAT ATTGGGGGTA
9751 GCTACATTTT GGAGTTTGA GAACGAATTC AAATAAGTTA CAAATTATGT
9801 TTAAAGTGGT AGACAGAGAA CCTGATTTCA ACCTATTCTA ATAAAGCATT
9851 CCGTGAAAGC CATTTTAAAG ATGATCCATA TTTGTTAAAG TGGTAATTTT
9901 TATATTCTCT GATATGGTTT GGCTGTGTTT CCACCCAAAT CTCATCTTGA
9951 ATTTGAGCTC CCATAATCCA CACTGTGCTT GGGAGGGAGG TAATTACCTG
10001 GTGGGAGGTA ATTGAATCAT GGGGCGAGG TTTCTGTGTC TGTCTTTGTG
10051 ATAGTTAATA AGTCTCATGA GATCTGATGG TTTATAAAGG GCAGTTCCCC
10101 TGCACACTTT CTGTTGCCGT TGGCATGTA AGACATGCC TTGCTCTCT
10151 TTCACCTTCC ACCATGATTG TGAGGCCTCC CTAGCCATGT GGAACGTGTA

FIGURE 3-3

10201 GTCCATTAAA CCTCTTTTTC TTTATAAATT ACCCAGCCTC AGATATTTCT
10251 TCATAACAGT ATGAAAATGG AGTAATACAT TCCATTACCA TAAAGAAAAG
10301 GCTTTCATGT ACATTATTTT TTAGAGTAGC CTTGTGGTAT GTCATTACCT
10351 CCATCGATAG ATAAGAAAGT TGAACCTTGC ACAGTATTAG GATTGATATC
10401 AGTATTTACT TTTATTAAGT TGAACCTTAA AGCAGCTTTT TGGCTGGAAA
10451 AAAGTTGTAC TTATGTCAAA GTTGTCTGTA AAGTAGAATC CTACTCCTGT
10501 CCCCAGCCTG AAACATTTTA CTACATATTT ACTTGCATGT TCTTTAGAAT
10551 ATTCTCTCAA TAGTGTCTCC TACTCAAGTC ATCAGAAATG CTGTGATGTC
10601 ATTTTITGGAA AAGAATTCCA GAGTTATCAC CGCCTAGCTA GAAATCTGGT
10651 CTTATATTCA AATTAACAA GCAAACTTAA ACAAACAA GCTAAACCTT
10701 AAACATAACA TGAACAGTCA GCTCACCACA GTTCTGAGCA CCTGCCTTGG
10751 CCTGGTGCCA CCCACGCAGG GACTGTGGAT GTTTTATTG GCAGAGATTC
10801 AGAACAGGAA ACTCCAGCAC ACCTGGGAAC TGCGCAGACC CACCACATAA
10851 GACAGATAGC CTATCAGTGG CTGGAGGAAT GGAGGAAAGC AGTGCTTTCA
10901 AATGTACATG CCAATGTGT ATGATCATAC CTCCTTTGTTA AAGTGCCCTC
10951 TTTAACAGCA AAAGTAATTC CTCACCTTGC ATATAGGAAC TAAAAAAAG
11001 TCGATGAAGA AATGGCTTGC CTTATTTTCA AGTAAGAAGT CTTTTTTCAT
11051 TTCACTAATT TTTAATTATG GGCATAAGTA TGAAATACAG ATTAGAAATA
11101 CTGAATGTGG ACCAAAGCAA TGTTTCCTTT GTGGACCAA GCAGTGAATC
11151 TTTTTCCTTT CTTCCTTTCT TTTCTTTTTT TTGTTAAGAG ACAGGGTCTT
11201 GCTCTCTTGC TCAGACTGGA GTGCAGTCAG TGATGTGATG GCTCACCATA
11251 ACCTCAACCT CTGCGGCTCA AGGATCCTC CTGCCCCAAC CTCTGAACA
11301 GCTGGGATTA CAGGCACATA CCACCACACC TGGCTAATTT TAAAAAATTT
11351 TTTTGTGGGG GAGGGTCTCT CTATATTGCC CAAGCTGGT TCAATGCCT
11401 GAGCTCAAGT GATCCTCAA CCTCAGGCTC CCAGAGTGT GGGATTACAG
11451 GTTTGAGCCA CTGTGCTGG CCCCACAA GGTGTTGTAA CTCCCTTTGT
11501 CCCCTCTTGA TAAACATAAA AGTCTCATGG TACTTCAGAA TTTTGTGCA
11551 CACATCCAAG TGTAAGTTGC CTTTCTTGT GAGTGGCAGA AGACAATGTC
11601 ATACTCTGTA TTTATCCATC AGCCAAATTT TTGTCAAGCT TTAATTTTAT
11651 TTTTAAATTT TTTATTTGTA TTTTTTTTTG GAGACAGAGT CTGTCTCTGT
11701 CGCCAGGCTT GGAGTGCACT GCGTGATCT CCGCTCACTG CAACCTCCGA
11751 TGCCCTGGGT CAAGCGATTT TCGTGCCCA GCCTCCAGAG CAGCTGGGAC
11801 TACAGGCACG CACCACCATG CCTGGCTAAT TTTTGTGAT TTTTAGTAGA
11851 GGTAGGCTTT GTCAGGCTGG GTCCGAAGCT TCTCGAAGCT CTAATCTCAG
11901 GTGACCCACC CGCCTCAGTC TCCCAAAGTG CTGGGATTAC AGGCATGAGC
11951 CACCATGCCC GGCCAAGCTT TACTTTTAGT TATGTTGTGG ATATAATTAG
12001 AATTATTTTC TTGTTCTTTA AATACAGAAT TATAATATTG AATGTGTGCT
12051 TTAATAAATG TAGTAAATGT ACCCTCTAG AACTTCTGAT CTATGCTCT
12101 TAGTCAGTGA GGGGAGCTGT GCGCTTTCC TCCTCCAGTG CCTCCACTTA
12151 AGAATCACTC ACTAAGGAGT TTTAAATTCA ATTAAGGTA TCCTTTAGAT
12201 AGTTAAGTCT AAATGAAAGG TCAATGATTA AATTAATGGA TAAAAGTCCA
12251 TTGCACCTAC GGAAAGGTGC ATTGGTCTAC AGTTCAGCTA GTACCTATTT
12301 TTTGCTAAAG ATTAATTTGC AGCTGGGCGG GGTGGCTCAT ACCTGTAATC
12351 CCAGCACTTT GAAACCTGA TGGAGGCGGG GTGCCGTGGC TCATGCTGT
12401 AAATCTTAGC ACTTTGGGAG GCGAGGTGG GCGGATCACT TGAGTCCGG
12451 AGTTAGAGAC CAGCCTGACC AACATGGAGA AACCTGTCT CTAATAAAA
12501 TACTAAATTA GCGGGCATG GTGGGCGATG CCTGTAATCT CAGCTACTGG
12551 GGAAGCTGAG GTAGGGAAT CGCTTGAACC CGCGAGTTGG AGGTGCAAT
12601 GAGCCAAGAT CATGCCATTG TACTCCAGCC TGGGCAACAA GAGTGAACT
12651 CAGTCTCAAA AAAAAAGAAA ACCCTAGGTG GAAGGATCGC TTGAGTCCAG
12701 GAGTTCAAGA ACAGCCTGGG CAACATAGTG AGACCCATC TCTACTTTTA
12751 ATTAATAAT AATTAACATT AAAAGTGTA GTAAAAATTT TAAAAAGAGT
12801 AAATTGTATC AGCAGTGTTC TGCTGTGTT CAGAAAGCCA AAATTTATAT
12851 TTGTGTTTCA TTTAGATTGG ATCCAAGACC AATTTTGAGA TGTGTTTTAA
12901 TATTACAAAA ATAGAAAACT ACCTGTTTCT TAAATGGTGA TATTTATTGA
12951 CTTTCTGTG TAGATAAGTA TTAATGCCAA GTCAAGTAGG TTAGTCTGGA
13001 GACTGTTTTT ATTAATAAAA ACCTTTTCTAT CTTAATTATC CTTTTATTA
13051 GTTTTGACTT TATGTTGCAA CTTCAAAGCA GCATCTCAA GGGTTCACAT
13101 TTGTCACTGG TTGTTTAAAC AACGACATTC CACAAAGTTA ATTGATGTTT
13151 TAGTGTGAAT GGGGAGGAA GTTGTCAATG TTGTCCTGTA GTAACGTAGC
13201 ACTCAAATTT TGACAGGAGG ACCCCAGCCA TGTAAGTTAT GACTGTAAGT
13251 ACACCTCCCT TAAGAGTAAG TTGTTTTTTA GGAATAAATG ATAAATGTAT
13301 GGAGTTTTAG TTGTAGGTGT TATGTTTTGT CTCCTTCTTC TCAGAGAAAA
13351 ATGTTACTGT GGAATAGGCT TAAACTGAAA AAAGGATCTG ATTTTAAATA
13401 AGATCAGATT CTTTGGCCAT ATTTTGATAT TGGTTCAAAA CAAATGTTTA
13451 ATATCAGATG CACAATGTTA AGAGCTCTAT AATGTAGTGG TAACACCTGA
13501 GCCTCAGCCA GTGACTACAC ATTAAGTTCT TGTTCATTTT TTGAGGGGAC
13551 AGGGGAGCTG GTGAGGCATA AAGAAGGGTC AGAGGAGATA ATAGACTTAT

FIGURE 3-4

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13601 ATTTGATTTT TTATGCATAA TTATATAGGA AACATTAAAT CCAGAGTTGA
13651 TAAATAATTT GTATGTATGT ATTTATTTAT TTTTGAGACT GGGTCTGCT
13701 CTGCTGCCCA GGCTGAAGCG TAGGGGTATG AACACAGCTC ACTGCAGCCT
13751 TGACCTGGGC TCAAGCGATT TTCTTGCCCTC AGCCTCCCGA GTAGCTGGGA
13801 CCACAGGCAT GTGCCACTAC ACCTGGCTAA TTTTFAAAGT TTTTGTAG
13851 AGATGGGCTC TCACCAGTTT GCCCAGTTTG GTCTTGAAGT OCTGGGCTCA
13901 AGCAATCCTC CTGCTTGCGC CTCCCAGAGT GTTGGGATTA TAGATGTGAG
13951 CCACCATGTT CAGCTGATAA ATAATTTCTA ATCTAAAAAT CCTATTTTGT
14001 ATGGAGAGGG GAGGGCAAAT AGGCTATTTT TTCCACATTT TGTGCTGGC
14051 CAGAATCTCA GAGGGTTTTT ACCTGCATTA AAAATGATTA AGGCTGGGCA
14101 GAATGGCTCA TGCCTGTAAT CCCATCACTT TGGGAGGCTG AGGCAGATGA
14151 ATTGCTTGAG CCCAGAAGTT CTAGAGCAGC CTGGGCAACA TGGTGAAACC
14201 CCATCTCTAC GAAAAATGCA AAAATTAGCT GGACGTGGTG GCAGGCACCT
14251 GTAGTCCAG CTACTCAAAA GGCTGAGGTG GGAGGATCAC CTAGCTCTAG
14301 AGGTCAAGGG TGCAATGAGC CAAGATTGCT CCACTGCCCG CCAGCTGGG
14351 CAGCAGAGA AGACCCGTGC TCAAAAAAAA AAAAAAAA GGTTATTTT
14401 TTTCAGCATA GACAAAGCAG GGGAAGGAAA AGATTATGTT TCAAATGTTT
14451 ATTTAACTA CTACATTTAA AGTAATACTT CCTAATGATT TAACTTTAG
14501 ATTAGTCTAT TTATGGGTCA CCTGGAAGAT TCTTTATAAA ACATGAGAGT
14551 TTATTACTTC TTTCAATACA CGGGTGTCTG TAAATGATG TCAATAGATC
14601 TGAAGCCTGA ACTTTCTGAA GAAATGTTGT GAAATTATCT ATGGATGTCT
14651 ACTTGAATTT AAATAAAAAAT AAATTGTAAT ACATTTGGTT TTATTGGTTT
14701 TGAATTTGTA ATTTATTTGGG GATTTGGATT TGGTTATCT ACAGTTGTCT
14751 TTTTTTTTGA GGTGGAGTCT CGCTTTGTCA CCAGGCTGGA GTGCAGTGGT
14801 GOGATCTCGG CTCCTGCAA TCTCTGCCTC CCGTGTACAA GCGATTCTCC
14851 TGCTTCAGCT TCCTGAGTAG CTAGGATTAC AGGCATGCAC CTCCATCCC
14901 AGCTAATTTT TGTATTTTAA GTAGAGATGG GGTTCACCA TGTAGCCAG
14951 GATGATCTCG ATATCTTGAC TTCTGTATCC GCTCGGCT ACCAAAGTGC
15001 TGTGATTACA GGTGTGAGCC ACCGTGCCCG GCTACAGTT GTCTTTTTT
15051 ACTCACTCCC ACAGATGAAT CATTATAAGG AGGTAGCTT TCCTTAAAGA
15101 ATACACTCTC CTTAAGCGGT TTTATCAACA AAGCCAGGGA ATGCCAACT
15151 TTAACACTTT TACCTAAATT TATAACTGAT GCATGTATGC ATATATACAT
15201 ACATACATAC ATGTATATGT TGTATATAT GTATGGGTAT CATCAGTATA
15251 GTCTATCAGT ATAGTAATTG TTTATCTGAA ACTTGGGTT CTCTCTCGT
15301 CTCTCTCTCC CTCTCTCT CTCTCTCT CTCTATATAT
15351 ATATATATAT ATATATATAA ATATATGTAT ATATATTTT TCTTTTTTG
15401 AGACAGGATC TCATTCTGTC ACCCAGGCTG GAGTGCAGTG GTGGGATCAT
15451 GGCTCACTGC AGCCTCGACC TCCTGGGCTC AAGTGATCCT CCCACCTCAA
15501 OCTCCCAAGT AGTTAGGACT ACAGGGGCAT GCGCTACAC GTAACATAAT
15551 TTTGTATTTT TTTGTAGAGA CAGGGTTTTG CCTTGTGCC CAGGCTGGT
15601 CTGAAATCCT TGGCTCAAGC AATCTGTCCA CCTCAGCTC TGAAAGTGCT
15651 GGCATTACAG GTCTGAGCCA CTGCGCCAG CCTAGATTTT TTTGAATTGT
15701 AAAAAAGTAA CCTGCTCCT ACTGAAGTAA ATAGAGTTAA AAAAAAGTAA
15751 CTGGTACAGA CACCTGTATT TTCTGACACC CCTAGAAGAG TCCCAGGTAC
15801 CCTATAATCA AATACATTAA CATTTCTGCA GCAAAATGTA TGGATAAGTG
15851 AGTTAAATAG AGACCATGAG TAGCTTCAGG TCAGTTCAGA TCAAGTTTGT
15901 CTTCTAATTA AATGTTGATA TTCTCTTACA AAACTTTTG GTTTGGGTTT
15951 TCAGATTTGC AAATAAATAA TTATAAATTA TTATTTTTT TGAGACAGAG
16001 TCTTGCTGTG TTGCTCAGGC TGGAGTGCCA TGGCAGGATC ACCGCTCACT
16051 GCAACCTCAA CCTCAGGCTG AAGCCATCCT CCCACTTCAG CCTCCCAAGT
16101 AGCTGGGACT ACAGGAGTGT GCCAACATGT CCAGCTCATT TTTGTATTCT
16151 TAGTAGAGAC AGGGTTTCGC CGTGTGGCC AGGCTGGTCT CAACTCCTG
16201 GTCTCAAGTG ATCCGCTGC CTTGGCCTTC CAAAGTGTG AGATTATAGG
16251 TGTCAGCCAC TGGGCTGGC AGAATTATAC ATTTATATGT CAATATTTGC
16301 TTTTGTTC TGTTCCTCAG TAAACGTTT TTAAGGTACA TTTTCTGTA
16351 TCTCATAAGG CACCTGCTTA ATTGTTTCAG TAAGTGTGAT GTTCTACCAT
16401 ATTGGTCTAC CCTAGGTTAC TCAACCAGGC CTCCTTTGT TAGTGAGTAG
16451 CAGGCAGTGT TGTACAACAT ATGTAGCATA TCTGTATATG TCGTGAACA
16501 AATTGTTTTT TTCCCTCTC TTGGATTGCT TCCTTGGGTG TACGTCCAGA
16551 AGTGAGATTA CTGGTTCAAA GGGTATGAAC AACTTTATAA CACCTGTTAC
16601 ACATTGCCAG ATTATCTTT AGAAAACTTG AATCAGTTTA TTGTGCCACC
16651 AGTGATGTGC TGGCTTCTG AAAAACTTAC CAATGTTTG TTTTATTTT
16701 ATTAGTATTT GCTAATTTGA TAAGTACTAA TGATATTTT TAAAAAGTAGT
16751 TTAAAATCAT ATTTCAAGTC TTATAAGTCT GTGTTCCAG TTTTGTAGCC
16801 CTTTGAAGC TGCAAAATGAC CTGGCAATTA TATATAATAT TTGAAAATAC
16851 AAGAGGACAT ATGCCAGTGA ATATATTAGA GTAAAACTTC ATTCCCATAG
16901 GTAATGAAGG AATGCTTGAG ATTATCTTAG GCTTAGATT CTCACCTGAC
16951 ACATCTTGGC AGGTAGACCA TGTCTTGT TCCTCTGCTG TCTTAGCCCA

FIGURE 3-5

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17001 GGTGTTGATC AAGGTCTGTC TTAGGGGCGG GGATAGGAAT GGAAATAAAC
17051 CATGTAGAGA CTTGGGCATG AGGACTTTGT GATTCTTCCA GGTGACATCT
17101 CATCCTTCAG AGGATCAAGT CTGCAAGAGT AGCCATATCT TAATCTCTTT
17151 CAGTGCTATC ACCTTGATC AACCTCTGGA CTGAGCTAA TTCCGTTGAA
17201 AATATTTTAT TAATTAATTT TGGGGTATGT TAAAAATTTT GTTTGCATGT
17251 ATTTATTTAG TTATTTTAT GAGACAGGGT CTCGCTCTGT CACCCATGCT
17301 GGAGTACATA CGGTTGCACG CTCATGGCTC ACTGCAGCCT TGACTTCCCA
17351 GGCTCAAGTG ATCCTCCAC CTCAGCCTCC TGAGTAGCTG GGACTACAAG
17401 TGCAATGTCAC CACATTTGGC TAATTTTCAT ATTTTGTGTA GAGACGGGGT
17451 TTGCCACATC TGCCCAAGCT GGTCTCAAAC TCCTGGACTC AAGGGATCTG
17501 CCTGCCTCAG CTTCCCGAAG TGCTGAGATT ATAGGTGTGA ACCACCGGGC
17551 CCGGCTCCCC ATTTAATTTT GTTGTGTGTT TTTTGTAGAT GGAGTTTCAC
17601 TCTTGTGCGC CAAGCTGGAA TGCAATGGCA CGATCTCGGC TTACGGCCAC
17651 TTCCACCTCC TGGGTTCAG CGATTCTCCT GTCTCAGCCT CCGAGTAGC
17701 TGGGATTACA GACACACGCC ACTATACTG GCTAATTTT GTATTTTATG
17751 TAGAAATGGG GTTTCACCAT GTTGGTCAGG TGGGTCTCAA ACTATTGACC
17801 TCAGGTGATC CAGCTGCTC GGCCTCCCAA AGTGCTGGGA TTATAGATGT
17851 GAGCCACCAT GTCCAGCCAC CCATTTAATT TTTTGAGCAC AAAATATGTA
17901 CTGAGAGCCA CGCAAGAAAC AAATTGACT TATTCCATGC TCTTGAGAGG
17951 TCATGAGGGG AAACAAAATG ATACATAAGT AACTCTGAGA GAATATGCTG
18001 CACATGCTAA ATCCTGTGCA AGTAAGATAT AGGATTTTAG AGGAAGGGAG
18051 AATGACTTCT GATTGAGCTG ACTAGAGAAG GCTTCAGTTT TTGAGTTAGG
18101 TGTTACGAGA TTGGGAGACT TTTCTCAGCA TATCTAACAG AAGAGGGTAT
18151 CCGAGGTGAG AGTGTAAAGC CTGGGCAAGG GTTGGGAGGC AGTTCTAATA
18201 CTGAATGTTT TACTGTGCTG TTAATATGTA TTTACGGTTA TTTTGTTTAA
18251 TCTATCCAGT AATCCTTTCA TGTAACAATT ATGATGTGTG TGTTTTAGGT
18301 GGGGCTACTA AGGCTAGTAA GTAGTGAGGC TGGATTTAAA CTTAAGTCTC
18351 CAGCTTCGTG GCCCAGGTTT TTTATACTTG ACTCCACACT GGGCTTATTA
18401 AGTGAATGAC AAGGAGTTTG ATTTGTGAG GCGCGAGGAT ATGTAGTGAA
18451 AGGTACATAGA CTATAAGGCT GGCAAAAGAT GGTGGAGCTG GGGAAACGGAA
18501 GATCTAAATG CCAAGGTAAG CTTGGACATT ATTTAATAGA GGCAATGGGG
18551 AGATACTGAG GATTTCTGAA GAGGGTTTCT AAGTAGTGCT TTAAGAAAGAT
18601 CTCTGGGTTG CAGAGGCAAG AAATAGGAGG AACACCAATT ACAAAGCCCC
18651 GACCGAAAGC CGAGTGAGAT TTGAGGGTCA GCCATCGAAA TGGGAATGAA
18701 GGGACAGATG TGAGACATTT CAAAGGATAG ACTGCAGGAA TTCTGGCAAA
18751 GAATGGGTTG GACAGTGATG AAGAACACAG AAACAGCATT GATGCTACA
18801 TCTGGAGCCT GTGTCTTAAT AATTTTGTAT CAGGGAGACC TACAATACAT
18851 TTTGTATTGT GCCCCACAAA ATCATGTGCA CAGCCCTAGA TGATGTCATG
18901 GACAGGTATG GGGCATGAGG AGAAAGAGTT GCCAGGGAAA GGCTGGCTCA
18951 CATTTTAGAC ATGTGGAGCG TTAAGGGTCA GCAAGACATC AAGGGCGATG
19001 TCAGGCAGGT AACTGGAAAT GCAAACCTGT AGTCTCAGAG TGACGCTGAG
19051 TCCAGTGGTG GGGCTTTGGA AAGAACATGT ATCTCTAAGA GGAACATGAC
19101 ATAATGGAAA CCCAGAAATC CTGTCTTGAG CGGACTCAGG GGCTGCTTCT
19151 AGGTAATTTA GTTCATTTCT ACTGAAATCA TTATATTTAA AAGTATGGCC
19201 GCACTGAGAT GGCCACTGTA GCTGCTGCA CCTCTTAGCT TTGGTCTTAA
19251 AAAAAAAAAA AAGTAATAGA ACTTCCTTAA AATGCTTTTC TAGCCTTTGG
19301 ATTTCTCTAA TTCAGATTTG CGTCTTCCCA AGGGTCAAAA TTATATTTT
19351 ACTATCCCTG TCTTAGGTAT TTCCAAAAC TCGTCTTAAG ACTTAGCAT
19401 TTTTTCCTT CAATTTGACA TGACTGCTAA AGACTTTTGG CATGTTCTC
19451 CTCCTTTCAT TTGTGATGTA ATTAAGTTGG TCTGTAAGTC TTATTTTAA
19501 GATGTTCTAG ACCAAGAGAC TGTGAGAATA GCTTACAGTC ATTTCAACTA
19551 ATTTATGTAT TTAAATTTA AAGTATTGAC AGTGGTGAAA ACCTGTTCAA
19601 CAAGCAGATG ATGTATCTT ATATATTAC AGAGTTTAGT AACTGAGCCA
19651 ACTACTTCAT TCACAGTTCA AAATGAAAAC AGCTAATTCT TTTAAGTAAG
19701 TATAGATTCT ACTCTTTAAA AGAGTTATCT AGGAGAGCTA CTATAATACT
19751 ATTATAGAAT AAGTGAAATT AAGTTATCTG ACTGGGACTG GGGTGAATA
19801 TTGCACAGTT TATTGAGAAA TATGGACTGT TTTTGACAT TCATAATGGA
19851 CATTGAGGT TTGTTAGGGG AGGAGGTGTC ATCTTTATGG CACTTTCTGG
19901 CTGGGAAGGG AGTCAGTCTT AATTGAGATA ATAAGTACCC ACCTGGCCAC
19951 ACACAAGTGT GTTTTGCTT AGTTACCTGT CACACACTGA GCAGTGAGAC
20001 TCAAGAGAGT GTCAAAGTAC TTTTCAATGC ATAAAGCACT ACAGATCTGT
20051 CCAACTGTTT GTGAGTGAGC AGGTTGGCAC GGTGCCCTGTG TGGGGGCGTG
20101 TGTGTTGACT CAGTGCTGT CCTGTGATCT CTCAGGACTC AGGTCTGAA
20151 TTGCTCTGTT GTGACTGAAG CCCAGCTGAA GGTGCTGGAA GTGCAGTGAC
20201 CCTGGAGGAA GAACAGTAA CAGCAGAGGG TGGATGAAAG GGAATTGATA
20251 GTTGTGTAAG AATAGATATC TGCCGTTTTT TGTAAGCCAA GACACCTTTA
20301 CCTTCCAGT AATGTTTTCA TCTTTTAATA TCATTTGGCT TCATTTACAG
20351 AATCTGTATT AAAGCAAAAG TCAGCATGTA AGGTGGTATT TTGACCACAT

FIGURE 3-6


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20401 TTGTCTGCTG TTGTGCCTTC TGGGTGAACT GAAGTACTGG CTTACTGACT
20451 AGTAAATATG TTTTCTGACA ATTATAGGGA AGGGAAGAAA AGGAAAGTCC
20501 AATTAAAGCA TTTTCTCCT CAGAGTTTGA AAAATAGAAT TCATGCAATC
20551 TTTTAAATTC CATGCCAACA CATCAGACAA GAAGAGACTT GATAGTAGTA
20601 AAGGTTGGGA ATCAAAAGAA CAATGTAAGT TTTTGATATT GACTTCAAAA
20651 CATGGTGTTC TATAATTTAG TGTTCATTTG TTACGTGTAT GGTATTATAA
20701 TTAATTTTGT ATATGTGGTA GTTATTTTTT GACTTTTGAT TAGGAAACAA
20751 ATATTGAGCC ACTTCAAGAG GCAGACTATT TTGGAAAAAA AAGTCTGGTA
20801 AAAGTAATGC TTAATCTAAT TAATCTGTCT TCATCCTCTT AATTCATCAA
20851 GATGACTTTG GGTGTCTGGT GGCAACTGAG AATGGGTAT GGAAGACGT
20901 CAAGGCAATG TAATCCCTAT TATTTACGGT TACTTGAGAG GATAAATTAA
20951 TCAGCGGTCA CTAATCTTTG GATAATCACT CTATTGAGCT GGAACATACC
21001 TTAGTATTTT GGAAAGCAAG TCAGTGAGTT AGAACTGTCA AAACGTATCA
21051 GCTTTTCTAA GCTTAATGAT AAGTGAATAG AAACAGTTG CCTTCAACCC
21101 TTTCTCCTCC GCATTGCAGC ATGATCATTG TGTAACCTCG GAAATGGTTT
21151 ATGGAACAAC AGTGAATAA CATTGATACA CTGTCTTGTC GTAGATTTTC
21201 AGATAGGCTT TAGACAAAGT TCAGAGCCTT TCCTCTAGCT GGGGATTAAC
21251 AAAGCTGCCT TCATAGTTAA ATGTTTGCAC CCTGTGTATG CATTTTCAGT
21301 TACTAGAATT AGGTAAGTTA GTGTTATAAA ATTGGTTTGA GTGTGGATTG
21351 TTTAGGAAGT GAGTCTTTTG GTGGCAGCAA TTCTGTTATG CATTAAATAG
21401 ATACATATTT TGAACTAGTC GACATTGTTT CAGTCTGTAT TTATTAGATG
21451 CTGGGGTGGG TATGGGAATA AAGAAACGTA TGAGGGGTCT TGGAAAAGTT
21501 CATGGAAGAA ATGTACACTA TGAAAAAATA CTGTGCATGG ATTTCAAAAT
21551 ATTTTTGAAC CAAAATCAAC TTGTACTAAC TTGTTACAAC ATGTCTGAAC
21601 TTGTTACAAC ATGTCTGAAC AGTTGAGAC ATTAAGAAAT GATATCGCAC
21651 CAGTTTTTAA AAAGCGCCTA TCAGGGTAAC ATGAATTCTG CTAATAATTGA
21701 AGCAAGAACA AACATCAAAT TTATGGTGGT GCTTGGGTAG AAGGATGGTG
21751 AAATCATTGA TGCTTTACAA AAAGTTTATG GGGACAATAC TCTAAAGGAA
21801 CCAGCAGTTT ACAAATGGCT AACATCCTTT AAGAAGGGAC GAGATGATGT
21851 TGAAGAGGAA GCCCACAGCA GTAGACCATC CGTGTCATT TTCAAGGAAA
21901 AAATTAATCT TGTTCATGCT GTAATTGAAG AGGGAACCTT ACATGAAATT
21951 TTAAACAAGT GGGATTGAGA TCCTGTGGCA TATGTCTGAA GGATTGTAAT
22001 AGGAGAGGAA ACATGGCTTT ACCAGTATGA TGCTGAAGAC AAAGCACAAAC
22051 CAAAGCAATG GCTACCAAGA GGTGGAAGTG ATCTAGTTAA AGCAAAAGCA
22101 GACTAGTCAA GACCAAAGGT CATGATAAGA GACTTTTGGG ATGCTCAAGG
22151 TATTTTGCTT GTTGACTTTC TGGGGAGCCA AAGAATGATA ATATTTGCTT
22201 ATTGTGTGTG TTTTGAGAAA ATTAGCCAAA GTTTTAGCAA AACAAACAAA
22251 TACCCAGGGA AGCTTTACCA GAGAGTCCTT CTCCACCAGG ACAATGTTCC
22301 CGGTCACTCT CTCATCAAAA AAGGGCAATT TTGCAAGAGT TTTGATGGGA
22351 AATTATTAGG TATCTACTTA CAGTCTTTT TTTTTTTTGA GTTGGAGTCT
22401 TACTTTGTCT CCCAGGCTGG AGTGCAGTGG TGCAATCTTG GCTCACTGCA
22451 ACCTCCACCT GCCAGGTTCA AGCAATTCTC CTGCTCAGC CTCCCAAGTA
22501 GCTGGGATTA CAGGCGTGAT CCACCATGTC CAGCTATTTT TTGTATTTT
22551 AGTAGAGATG GGGTTTCACC ATGTTGAQCA GGCTGGTCTT GAATTCCTGA
22601 CCTCAGGTGA TTCACTGTG TCGGCCTTCC AAAGTGCTCG GATTACAGGC
22651 ATGAGGCACT GTGCTGGCC TATCTTACAG TCTTGATTG GCTTTATCTG
22701 ACTTCTTTT CTTTCTAAT CTTAAAAAAT ATTTAAAGGG CACCTATTTT
22751 TCTTCAGTTA ATAATGTAAG AAGGACTGCA TTGACATGAT TAAATTCCTG
22801 GGACCCCTCA TCTTTAGAG ATGGACTAAT GGCTGGTATC AACTCACAAA
22851 AGTATCTTGA ACTTGATGGA GCTTATGTTG AGAAATGAAG TGTATATTTT
22901 CATTATCTTT TAATTTCAAT CTTTAGTGAA TTTTITGAGG TCCCTTGTGA
22951 TACATTTTAA TCCTAAGGGA ATAAAGAAAG GAGGAAGTCC TAGCCCTGTG
23001 CTGTCTGCCT AGGTACAGTG TCTGAAACAC AGACCAAGT TCACCCCTTG
23051 AAATTTGAGG TTTCCATTCA GGAGTTCTC AAAGAGAATA AATGAGATTG
23101 CTATGCAGGT GGAATCAAAG AGCACACGGC TTATTTATCA TAATCAAAT
23151 AATGCCATTT TCATAACAAA CTTACCTGCT TTATGTACAT TGTAAATTGT
23201 TGCCCTTGATA AGCTTCCCGG AGATAAAGTA ATTCAGCTAA GTATTATTTT
23251 CAATCATAAT TTGTGTTCAT TATGAGCAAC ACAATACTAT ATATGGGATT
23301 GATTCACCTG AGAAGTGGA TAAATATAAA TTAGATCTTT AGAAAAGAAA
23351 CGTAGATTTA AAAATCTTAT GTTAGAAGGC TCAATTAATT AAATGTAATT
23401 AATTTTTTAA AATCAGCTTT ATTGAGGGAT GACTTAGATA TTATATAATT
23451 CACAAATTTT AAGTGTACAG TTTGATAGTT CTGACAATCA AACTGTATAC
23501 AATCATGTAA CCACCATCAC AATCATAATA TAGTGTGTCC ATCACCCAG
23551 GGTGTACCTT CGTGATCCTT TTTGCAGTTA GTCITTTTCC CTTACATTCT
23601 GGCTCCTGAA AACTTGATCT GCTTCTGTG ACTATAGCTG TGCCCTTTCT
23651 AAAATTTTAT ATGAATGGAA TCATACAGTG TGTCTCTTT TGTATCTGTT
23701 TTTCACTCAT CATGATGCTT TTGAGATTTT TCCTGTGTGT GGTATGTATT
23751 AGTAGTTCTT TCTTTTTTAT TACTAAGTAG TATTCATTG TATGCTATG

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FIGURE 3-7

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23801 CCACATTTTT TTTTTTTTTT TTCGAGACAG AGTTTTGCTC TGACATCCAG
23851 GCTGGAGTGC AGTGGTGTGA TCATGGCTCA CTGCAGCCTT GACTTCCCAG
23901 ACTGAGGTGA TCCACCTGCC TCAGCCACCT GAGTAACTGG GACCACAGGT
23951 GTGTGCTAGT CTGTCTAATT TTTAAATTGT TTGTAGAGAT GGGGGTCTCT
24001 GTATATTGCC CAGGCTGGTC TCAAACTCCT GGCCTCAAGC AATCCTTCTG
24051 CCTTGGCCCC TCAAAGTGT TTTTATATCG ATTCACATAT TGATGGATAT TGGGTGTGTT
24101 CCTACCACAA TTTTATATCG ATTCACATAT TGATGGATAT TGGGTGTGTT
24151 TCAGTTGTGT CCTATTATGA ATAGAACTGC TATGAACATT TGTATGCAAA
24201 CCTTTGTGTG GATGTATGTT TTTATTTCTC TTTTGTACAT TAAATTTAAA
24251 TTTAAATTTT GTTCTGTATT ATTTGTATTT TTTAAATTTCT CAAGTGGGTA
24301 ATACTGTGTA CTTTTTTTTT GAAATTAATA AAATTGTGGC TGAACAAGGA
24351 GATAAAAAAG TAGGAGTGAG AGGACTCTGG AGAGTTACAG GGCTTTGGTT
24401 TAGAGGATTG GATGAATAGT GGTGCTGCCA ATAAAGAAAT TTAAATATGG
24451 CTGATATTTT CTATATTTAA GAAAGACCAA AGAGGGTCCA TTGAAATGAG
24501 TCAGTGGGAA ATCTCTGATG ACTTCAGCCA GCACGCTTTC ATCGGCTGG
24551 ATATATGGGA AGTGAAGTCT GATTATAGTC TGTGGAGCAG TGAATGGGAG
24601 GAAGAGATAG GGGTACAGGC TAAGAAGGGA GGAAGTCAAG TCAAAGGGAG
24651 AAGTAGGGTG GTAGCTAGAG GAAGATTAGA GTCAAGCGAG GGTAAACAATT
24701 TTTTTTTTTT TTGAAGATAG GAGTAGCTTG AGAACTAACT TAAAGAAGGA
24751 GCCTGTAGAG AGGGAGGAGG TGAAGTACT AAAGGTCTAA TTGATGGGGT
24801 AAGGTTTCATG AGCAGATCAG ATCTTTACAA GGAAGGTTCT TGCTGGGGGG
24851 CAAGATTCAA AACCCCTATT CAGAACCAGG AGAGAAGAAA GTAAGAATGG
24901 GAGCAAATGT AGGTAGGTTT GGTGAGGATC AGGAAATGGA GGGGAAGAGG
24951 TCATTAAATG TGGTCTGGG GTTGAGCAGC AGATTGGAAG AGAATGGCAA
25001 AAGTTTGGGA GCTGATTAGT GATAAGGAAA AGGTTTGAGA ATCCGATGAA
25051 GATTAGAAAC CATGCATTTG TAGTGAACT TGTCTCTAAG ATTGTGCCCT
25101 TACCCACCTC CAGCTGTGCT CTGATAGGTG AACTATACAA TTGATGTAAG
25151 GCTGGCAGAT AATCAAAGCC AAGAAATTTT ATGTTTCTA TCTATTTTCA
25201 CTTCCGTGCC ATATAGCTTC TCTCATATAG TACTCATATG TTTTGAGTTT
25251 TTGGTGAAGC TGATTAACA TTTAACAAC TTTTTTTTTA CATTTTTTAT
25301 TGTGACAAAA CATATATAGC ATAAAATTAC CATTCTGGTA AATTTACCAA
25351 AACCCATTTA TAGCATAAAA TTTACCATTT TGGTCAACTT ACTGTAAATT
25401 ACTGCCAGTT CTGTACAGCC ATTTGTTTAA TGCAGTCTGC TCTAATACCC
25451 TCCAAGGCAA AATTGCAAAAT AAAAOCCTGT TTTGATTCTT ACTTAATTTT
25501 TGCTAAATTTA CCAAAAGGCG AAATTTTATG CTATAAATTT TTTTGTGTTT
25551 GACATTTAAA ATATGTTTTG TAAAAAAAT TGACAGATAA AATTGTATAT
25601 TTAACATGCA TAATGTGATG TTTTGTATTA TGTATAACAT GATGTATATG
25651 CCATACATAA CATATATACA TTGTAGAATT GTTAAGTCTA GGTAATTAAAC
25701 AAATGCATTA CCTCACACAG TTATCATTTT TGTGGTGAGA ACATTTTAAAC
25751 ATCCACTCTC TTTAAATTTT TCAAGAATAA AATTTTATCA TCTGGTCATG
25801 GTGGCTCAGC CCTGTAATCA CAACACTTTG GGAGGGCAAG GCGGGAGGAT
25851 TGATTGAGAC TAGAAGTCT AGACCACTCT AGACAACATA CTGATACCCC
25901 GTCTCTACAA AAAAATAATA AAAAGAATGC AATATTGTCT AAATTTCTTG
25951 AATTTATTTT TTCTACCTAA TTGTCTGTTT AGCCTCTGAG ACCATTGTAC
26001 GCCCATTTCC CTCTCTCTC TAACCAGTCC AGCCTCTGAG ACCATTGTAC
26051 TTTCTATTTC TATGAGATCA GCCTTTTAAAG ATTCTACATG TCAGTGAGGT
26101 CGTGTAAGTA TTTGTCTTTC TGTACTGGC TTGTTTTACC ATTGTACCA
26151 TTTATAAAGT GTACAATTTA GTGGCATTAA GTACATACAG AATGCTGTTC
26201 ACCCATTAAT ACTGTCTTAC AATTTTAATT TGAGGCATGA CTTTGTCTATC
26251 TCTCTTCTAT CCTTTGTACC ATTCTTGATC TATAAACTCA ACAAAGTCTT
26301 TAACTGAGTA GAATATTTT GTATGTGTGT ATAGATGTGT GTGTGTGTAT
26351 ATAGGTATGT ATAGATATAG ATATAGATAT AGATATAAAA TTTTTTTTTG
26401 AGACAGAGTC TTGCTCTGTT GCCCGGGCTG GACTGAGTGG CATGATCATG
26451 GCTCACTATA GCCTCTACCA TACAGGCTCA AGCAATCTCT TCACCTCAGC
26501 CTCCCAAGTA GCTAGGACTA CATGCATGCA CCACCATGCC TGGCTAATTA
26551 AAAAAAATT TTTTTTTTCT AGAGATGGGG TCTCTGTGTT GCCTAGGCTG
26601 GCCTCAAACC TCTAGGCTCA AGCAGTCTCT CTGCCCTTGG CTCCCAAGGT
26651 GCTGGGATTA TAGGAATGAG CCACCGTGCC TGGCCAGTAT TTGTATTTTT
26701 GATACTGAGC TTAATTTTGG CAAGTGCTGT GCAAGGCACA AATTGTGGTG
26751 TTAGCTTTCT AACTATTTGG TTGTAATTAT TTGTTAATAT CTGTCTTTCC
26801 TAGTCATGGA AAGTCCATGA GTGCAGGGGC TGTGTCTGTC TTGTTTACAA
26851 CTATATTTGC GCTGGCCAGC ACAGTGCTTT ACACATAGTA GACATTCACT
26901 GATGTTTCTG AACAAATGAA AGTCTTCTGC TGCAAGAAGA ATTTATTTCA
26951 GTTTAATAAG TTCTTTCTGA ATGCTTCATA TGAAGTAGGC AAAATTTGTA
27001 TTCACATATT AATACAGATT ATAGGTATGG CACATTCCAA TGTCTATTTA
27051 ATTAGTAGAA ATCAAAAAGA GTTTTATTTT GCAATTTTGC CTTGGAGGGT
27101 ATTAGAGCAG ACTGTGCACT AAACAAATAG CTGTACAGAA TTGGCAGCAA
27151 TAATCCCAA GTTTGAAGGC TGTAGGTTAA TTAGGATAAC TTGACAGGAA

FIGURE 3-8

27201 GTGAGTTAAT CAAATTTGAG AGTTTAATCT TCCAATAATT TATGTTTACA
27251 CATACTTCAA GTATATCAGC AGGTAACAGG AACTTTAGTT GCAGAATGCC
27301 CCAAAACACA AGAACTCCAG TGGATTTTCT GGCTTCCAGG AATGTTTTGG
27351 AGGAAGAAAA ACCAATAAAA TGATTTGGGG GTCATTTTGT TCCATTACTC
27401 TATATTAAT ATACTAGAAT TTAATAATTT AAATTTTAAA AGATAAAAAG
27451 ATGCAGTTTA CCTATTAAAC AATTAAATAA TTTAGGAATT CTACTTAGTT
27501 CTGTAATACT TTAATATGAG TAAATATGGG CATTTCTGTG TTAGCTAGAA
27551 TTAGATAGAG TATTGCCATT TTTTTCACCT GGCTTATGGT TAAATGGAAG
27601 TAAAGGGGCA AACTACACAT ATAAGAATTA GTAGTACAAT ATTTAATACA
27651 CCCCTGTAAG AGTTATCACA GTGTGTCCTC TGTGAAAAGT AAGGGCTCCA
27701 TGTGTGCTTG TGAAAAAGGC CACTGGAGGC CCTTTTCAAA AATTAAATCT
27751 GCCTCCAGCA AGGTGTTTTT CGATCACATG GAAAGGGGAA GAAGAAGCTA
27801 TCAGGAGCTC TGGGGTTTTT TTTGTTGTTG TTTGTTTGT TTTGCCATTT
27851 TAACTCTCAA GCTAAACTG GGGTTTCATT TGAGGAACCA GTAATAGAAA
27901 ATTTCTTATG TACATTACAG AAAATCTAGT ACTGAGTGGT TACTTTGGCT
27951 TTTCAATTGT GGGATTGTG GTGTGTGAGT ACATGCACGC ACTTGTGTGT
28001 TTAAGCGTGT AAGGCAGACA GACAGTGGGT ACAGGTCTTT GAAATGGAAT
28051 TCTTGGCAAA AGTAATAGAG AAAAAGAGGA ATACAAATAA GGGAGGAGGG
28101 ACAGGGAAGA GCAGAGTCAC AGGAAACAGT GAATGAGGCT GCAGTCTCAG
28151 TCGCCCTTTC TTGTGCTC TCAGTGTGTT CGCTGTCTTA TGTATGCT
28201 GGTTTTTCAGC CAACCTTGAG TGAGTAAAAG CCGGGTCTGA GGTCTCAGTG
28251 CCTGCGTGGC TGATATGAGC AGCTTGCACT TCTGACTGGG CCTGGAGCA
28301 GCAACAGCAC AGATTTCAGG GAACAGTTCC TCTTGTCATT TTTATTCCTG
28351 AGTCATCAA TTTAGTTATT CAGAGCTCTG CTGTTCCCAG CTACATACAG
28401 ATCAAACAAG CAGGGAATTT TTTTCTTTCT CTCTCTCCC TCTTTTTTTT
28451 GTATTTCCAT CTGTGTTGT ATACCTTTTC TTTGTTAAG TCAAGCATTT
28501 GAACATCACT AGTTACCATT TCCTTTAGCA AGCATAGGAC TTCTGTCTTA
28551 CTTAAATGTC TTCTAATGCT GTGATGTGTC ACAGTTAGTT GAGACGTAA
28601 AGATGTTCCA TACATGTGAC TACATTGGTA AATCTCAAAA ACATCATATC
28651 GAATGAAAAG ACAAGTTGT GAAATGTCTG ATGTGATGCC ATTTCTTAA
28701 AAAGTCATGT AAAGCAATCC TACCACATCT CATAGAATCT AAAAGGCTAT
28751 ACTGATGCTA AGATGCACTA TTATTTTCTG TACACTGAGA AAGGGGGAAA
28801 ATTGCCACTT AAATTGTGAT GTAATGTCTC ATTATGGATT GTAAGATACA
28851 TCTACATTTT AGAAATGTA TAATGTTAAA AATATGCATT TTAATTGAA
28901 GGTAAATTTA ATTAAATAT TTCAAAGGAA ATAAGGTAAA TGTATTTTAT
28951 TGAAGCATAG TTATGTAATA AAAATAGAAA AGCATGCATA GGAATGCTAT
29001 TTAGCCAATA CAGGATGTGG TAATCTCTAT AAAGGGAGGG AGGGAATGG
29051 AGGGGGGAGG CCAGAGGAGG GGCTCATCT CTGTAGTTTA TTTTTTAAAA
29101 TTATAAAGCA AATATTACCA GAGTTAAGAT TTTACAAAAT TCATTGGTAA
29151 GCACCTATAA TTTTCTGAGT GCTTTCAGTA TTTTATAATG AAAAGTATGT
29201 ATTTTAAAGG TAGGTTATCT ATTTATTTTT ATTTATTTTT TTTGAGACAG
29251 TGTCTCATTC CATCGCCAG GCTGGAGTGC AGTGGTGTGA TCTTGGCTCA
29301 CTGCAACCTC CTAAAGCTA CATTATTTAA AAGTCACATA CAAAGCAAGT
29351 TGCAGAAGCC TGTATGTAGT GGATTCTATT TTTTTTAAAT AGTATTTAAT
29401 TGTATGTTCT TCTACACTTT TTCTATGTCT CATCTTACCA TAGCTGTGCC
29451 TTTTTTGGTG GAAGTGAGGA CAGATTGCTT TCCACATCTC CATTTTTGTG
29501 TCTGAATTA AAGATGGACA AGTATCATGT ATTATCTTAG TAGTCATCAA
29551 ACAAGGAAAA AGTTTCTTT GTTTGCTTGT TTTTTTTAGA TGAAGTCTCC
29601 GCCCAGGCTG GAGCGCAGTG GCACGGTCTT GGCTCACTGC AACCTCTGCC
29651 TCCTGTGTTT AAGCAGTTCT CTGCCCTCAGC CTCTGAGTA GCTGGGATTA
29701 TAGGCGCCTG CCATCACGCC GGCTAATTTT TGTATTTTGA GTAGAGACAA
29751 GGTTTTGGCA AGTTGGCCAG GCTGGTCTTG AACTCCTGAC CTCAGGTGAT
29801 CCACCTGCCT TGGCCTCCCA AATTGTTGGG ATTACAGGCG TGAGCCACTG
29851 TGCCCGGCCT GGAAAAAGTT TTTAATGGTA AAGATGTCAT GGAATGAATA
29901 GGATTGGCTG GCATTATTTT TTGCTGTTAA TAAGCAGTGA GAAATGTTTC
29951 CATTATATGT TTCTTTGAAG CCAGCTTTCT GGTGCTCCC TTATCTTTT
30001 TTTCTCAGGC ATGTGGTATC TAGAAAGGGT CAGGAGTACC TTGATAAAAA
30051 TTATTGTACA AGTTGAGCAA AACTCAGTAG TATCATGCCT AGAGATCTGA
30101 TAAAGAGGCA CTTTTAAAT AGAGCCTTGA AGCTAACAAA CTTTTTTTTT
30151 TTAACCCCTT TACTGAAACC TAAAAAGAGG TCTGCAGTTT TTCCCTCCTG
30201 TCACCAGATG AAAGGGCTGT AGTAGTGTGT GCTTATTCCT CAGGCAGTGA
30251 GGAATCAAAG GACTGAAGGG GTGTTTGT TTATCATACTA CTTGTAGGGA
30301 CCCCTTACCT CCTATACCCA TGAAAAAGGA ATATTTCTTA TATCCCATAA
30351 TATTCTTTTA GTATCACACT TAGGTTTTAA TGTCCCTACT GTTAGAGTAA
30401 AATAATTTGG GCAAGACCAA TTTTTTAAAT GGCAAATATA GTCACATCAC
30451 TTGATTTCAG ATCTCACTCC CTAGCATCTC GCGTAATGAC TCATAAGAAA
30501 GAAAAAGCTA AATGCATGAA GAGGTTCACT ATACCATTAC TATAAAAAAG
30551 TAAAAATTTG TTTTGTAT TTTTTTTT TTTTTTGAGA TGTAGTCTCT

FIGURE 3-9

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30601 CTCTGTGTGCC CAGGCTGGAG TGCAGTGGCG CAATCTCGGC TCACTGAAAC
30651 CTCCGCCACC TGGGTTCAAG CAATTCTCAT GCCTCAGCCT CCGGAGTAGC
30701 TGGGATTACA GGCATGCACC ACCATGCCCTG GCTAATTTTT GTATTATTAG
30751 TAGAGACGGG GTTTCACCAT GTTGGCCAGG CTGGTCTCGA ACTCCTGACC
30801 TCAGGTGATC CACCCACCTC AGCCTCCCAA AGTGCTGGGA TTACAGGCAT
30851 GAGACACTGC ACCTGGGCAA AAAAAGTAAA AATTTGAAGT CAACTTAAAT
30901 GCCCCCAAAT ACAGGAATGG TTAAATGCTG ATGACCTACT TTATGTAATA
30951 TGATGCAAAT GCAAATGATA ATGGTTACTG TGCAGCAACA TGGAAGAAGT
31001 TGGTGAAAGC AGGATGTACC ACATGACTGT AACTCCAAAA TGTGCTTGCA
31051 TGTGAGGAGA GATCAAGGGA ATATAGAAAA ATGAAGACAT AGTTGTGTGA
31101 GGGTGGTAGA ATTTTGAGTG GATTTCTCCC CCCACTATTG GTAAAAATTT
31151 TTGTACTTAA TTCGTTGTGG GCAGCCAGAT CTTTAAAGG TAAATTTGAA
31201 TTTCTCTTTA AGAAAATGGC AGACAGAAGG ATGGGGGATA CTAGAAAAGT
31251 AAAAGTAGTG CCCCCTTTGA AGATAAAACT AAAACATTTT AAGCCTGGAA
31301 TTGCTTTAGC AGTACATGTA TTGATTATTT AATTTTGTCC TTTAGAAGAA
31351 AGTTGGCCCA ACACAATTAC ATGGAAGTTG GTTATTGAA GAGGATTGAT
31401 AAAAGAAAGT GGAAGGTCAG GCCAGGTGTG GTGGGTCATG CCTGTAATCC
31451 CAGCGCTTTG GGAGGCCGAG GTGGGTGGAT AACGAGGTCA GGAGATCGAG
31501 ACCATCCTGG CTAACAGGTT GAAACCCCGT CTCTACTAGA AATACAAAAA
31551 AAATTAGCCC AGCATGGTGT TGGGTGCCCT TAGTCCGAGC TACTTGGGAG
31601 GCTGAGGCAG GAGAATGGCG TGAACCCGGG AGGCGGAGGT TGCAGTGAGC
31651 CCAGATCAAG CCACTGCACT CCATCCTGGG CGACAGAGCG AGACTCCGTC
31701 TCAAAAAAAA AAAAAAAGTG GGAGGGTCAA AGCCAATTGTG
31751 CACGTTTATT CTTTGTACC ACCAAATAAA CCGAATTTTT GGACCAACTT
31801 TACTTTAGTC AATATTGGT TATTTGCTTT GAAGCTATTT GTTTGCAATA
31851 ATGCAATTAA CATCCTCAAC AGAGCCAAAG TCTGACCTG AAATGGCAGC
31901 ATCTTAACTA ATTTTATCAT TTGAATAGAA ATTGAACCTT TTGAGGGCAT
31951 GAAGTACTAT TTCTTTTCTC TATACTTCTT GTTTTGTGTT TTTGCTTCAC
32001 CACCGATTTA TGACTACCAA AACCCACAG ATCCTGTAAT TAACTCACAG
32051 CTGCCATCTT GCCACCGTAG ATAGAATTCA GGAGCTGGTG ATGAATGGGG
32101 AGAGAATAGA AAAACTAATA GACTGTAAGA ATTTTAGACC TCTGTGGCT
32151 TGCTGAACAA TTAATCCAGC CCTTCACTT TACAGGTAAG TAAACAAGTC
32201 CCAGGGACCC AGCAGTGAAC CTGTGTCTTA GGACTTCAA TCTAGTGAC
32251 TTTCTGTTAT ACTTCAAGGA GAGAACTGGA GGGAGAGCGA AGCCAAAATA
32301 CTGACATTTT AGAGGCTGCT TTTTAAGAAA GGATAGGACA TTGGACTTGG
32351 TGTCATTATC ATGTTAAGTT ATAGAATTTT TAAAAACACT ACCACTCCAA
32401 AACAAAAATA GGTAAAAGAT ACGAACAGGC AGTTACCAA AGAAGAAATA
32451 CAGTAGGCAT GAAAGAATGC ACAACATAAT TTAAGAAATG TAAATAACAA
32501 ATATCTATTG CTATCTCAAG AGAAAAATT TACTATGAGC TTTATTATTC
32551 AAACCATTTG CCTCATGGG CTTCTGTGTG ACAATCTACC CTAATTTTAG
32601 GAAATGTAAT TATAACATAA AAAATGAAT GCAAATGATA AAAGACGAAG
32651 TATAACCCGC TCAATAAAT TTCTGAAAGT TATAGTAGTT TTAACCTCT
32701 TTTTATTATC TCCCTCCAGT TCTGTCTAGC ACCTGTAAAG ATGAATTATT
32751 GGCTGGGTGT GGTGGCTCAC GCCTGTAATC CCAGAATCTT GGGAGGCGGA
32801 GGCGGGCGGA TCACGAGGTG AAGAGATCAA GACCATCTG GCCAACATGG
32851 TGAAACCCCTG TCTCTACTAA AAAATCCAAA AATTAGCTGG GCGTGTGCTG
32901 GCATGCCTGT AGTCCCAGCT ACTTGGGAGG CTGAGGCAAG AGAATTCCTT
32951 GAAACTGGGA GGTGGAGGTT GCAGTGAGCC AAGATCGCAC CACTGCACCC
33001 CAGCCTGGCA ACAGAGTGAG CCTCGTCTC AAAAAAATAA AAAAAAATAA
33051 AGGTGAATTA TCTCAGGTTT TATATGGCAT TGATGGACCA CTATTGAAGG
33101 AAGCTGTGAA GGACTCAAAG CAGTTGAGAA TAGGTATCGC CACCTAATTT
33151 TACTTGCTTT TCCTGCCACA CACAACCAGA GAAGCTGGTT CATCTCTTAC
33201 TGAGGAAATA TTTTCATGCT TATTCAGAAG ATTTTGCAGG ATCCTCAGGA
33251 AGACAAAGCC AAAGAACAAG AACAGTCAA GTAGGAACAG GACCAAAAGT
33301 CTGCACAGTC ACTGGAAGGT GTCATGCTGA AGAAGGCAGG GATGGGACTT
33351 TGAAATGAGG CCAAGTGCA TTCAGTAAC TTAGTGGTTA TCTGTTGTGT
33401 GCAAGCAATG TGCCATACT TTGAAGGGCT AAGCTAGCCC AGGAGTTCTG
33451 ATAAGACTTT TGAACCTAAT ATCGCTGACA CAAAAATAGG TCTCCTCAGA
33501 TCCTATTTGG AGGTAAACCG GGTAAAAGTG ATAAATAGTA TTGCTTTTTA
33551 AAGTTCATTA CATATTTTAG AGGTGAGTCA GTCAGACCAT ATAGAGATGC
33601 TTCATTTTAA TCCTCTGTAG CAAGAATTGG CAAAAATATT CTCTGTAAAG
33651 AGCCATTATG TAAATATTTT AGAGTAGGCT GCATAGTCTC TTTTGACGCT
33701 ACTCAGCTTC ATACAACAAG TAAACAAATG AGTGTGACTG TATTTTAGTA
33751 AAACCTTGTG AGAGGCTAAC ATTGGAATCT TACACAGTTT TTATATGTTT
33801 TGACATATTC TTTTGATTTT TTCCAACCAT TTAATAATGT AAAAAGCATT
33851 TGTAGCTTGT GAGGTGTACA AAAATGAGCA GTGGACCATG TTTTGCTGCT
33901 AGGGCACATT GTGCTGATCT TTAATCTATA GCATCACTGC CAGTAGAAAT
33951 ATAATGCTAG CCATATGTGA TGGACTGAAT GTTTGTAACC CCAAAAATCC

FIGURE 3-10

34001 ATATTTTGAA GCTCAAACCC CTGGTGTGGC AATATTTGGA GATGGGACCT
34051 TGACAGATGT ACTTAAGGTT AAATGAGGTC ACAAGGGTGG GGCTCTGGTC
34101 AGATAGGATT AGTGTCTTAA CAAGAAGAAA CACCAGATAC ACTCATTGAG
34151 AAAATGCGA ACATTGTAAC CTTACTGGTT TAGAAACCAT AATACTGGCA
34201 GGCTTGCTGG TCTTCATTTT TATTATTTTG AATGTCCTCT TTCAAGTATT
34251 TTATGTATCC AGACCCAATT TGTATGATAA GGGAAATTTCT TTCAAACCTAT
34301 TAGGTGAAGT CTTTAATTAT GAAGTTGGCT TAAGCCATTA AGTAGTATTA
34351 ATGGGGACAT CCATCTTAGA AATTAAGTGG AAATGTAGAC TAGAAATATA
34401 AAAAAGTGTG GTCATGACTA ATGTCTGTAT CCATTTCCTA AAAAAGAGAT
34451 TTGCGTATGT CCTCACATTG CAGAACCACA CTGACACTCA GGGAAACATG
34501 CTGACGTCAT TCTTCCAACA TCCTTAGTTT GGATTTCATG AAACATTTTTT
34551 TTCCATTTCT CCTTTTCTG TGTTTAGTAA TCCTTTCTTG GATTCTTGAA
34601 ATCAGAGGCA CTTATTGGAG TTGATAAATG GCAGTTCTTC ATGTCACTGT
34651 TTAGAAATTT AACTTAGCTT ATGGACTAGT TCAGGCTTAG ATAACCTCTGG
34701 AAGTCTTTGC ACTTTCAAAT ATACTTTTTT ATAGTTGAGT TTCTACACAA
34751 TATAACATTT TATAACTTAA ATGGAAGTAA AGTGAAATGC CAAAATGCCA
34801 GTTGATTCTG TTAATGTGTG CATCCCTCCA TTCCAGAATT CCAAAAATAT
34851 CAGACATAAT GACTTTTATT TGTATTTTAT ATTATTAGAT TTATCAGATA
34901 TAAAATTGTT CTTTAAACT GCTATTTCTA AACACTCTTT GTTTCTTTAG
34951 TTATCTTGTT AACTGGTAAT AGTTTTGAGA CTGGTGCTG TCCATGAACC
35001 ACTTTCAGCA TTGGTCCAGA TGACTTTTAC TTATAACCATG AGCCAGCAGA
35051 TACTGTAGAT TATTGGCTG TTTTAAAGA GAACATCATA TCATAGTGT
35101 GGTTATTAAT ATTTGAGCAA GATATTAGGG TTGTCTCGAT GTCCCAATCA
35151 TTGTGGAGTG CTTAGTGTGT GTTTGTTTTT TAAGAATTGA CTTGGAAACA
35201 TTTATCTTAA GGTTGTAGGG TTATTTTAT TCTTTAGTAC TAACGGTATA
35251 AACTGAATTC CACTGAAATA GAGCTTATTT TGATGTATAA TTTTGAAGT
35301 TATTTTTTAT AAGTCTGTGG GTAGATAGCA GCCAAGTAGG CACTTTATTT
35351 CCTAATAGA AAAAAATATA TATTTTGTG AAATATTTCT GTTTTATTCA
35401 TTCATTCAAA GTATATTTGG AATGTTTATT TCCAGGAAAT TTTGGAATAT
35451 ACAATACAAC CAGCTTCTTA TAACTCCACT TTAAGTGAGC CATAGGTCAA
35501 ATAATGACCA GCAAAATGTA ATGACACGTG TGCTCTTAC TCCCTGTGCG
35551 AGGAATTGAG GCACCTGGT AACCTGTAG GCCTGGATTA GTCCAGTTCA
35601 TTGGCAGCAG CATTATCCAG ATTTTATTGT GGGCGGCAAC GGTGGCTCAC
35651 ACCCGTAATC CCGGCACTTT GGGGGGCTGA GTTGGGCTG TTGCTTGAGC
35701 CCAGGAGTTC AAGACCAGCC TGGGCAACAT AGGAAACCTC GTCTCTACAA
35751 AATATATAAA AATTAGCTGG GCGTGGTGGC GTGTGCTGT AGTACCAGCT
35801 ACTTCGGAGG CTGAGGCAGG AGGATCACCT GAGCCAGAA AGTTGAGGCT
35851 GTGGTCAGCT CTGATTATGC CACTGCACCC CAGCTTGGGT GATACAGTGA
35901 GACCTGTCT TAAACAAACA AAAGAGATTG TATTGTGTT TGAAAAACAT
35951 AGTTTTTAGA GAAATCTGT GTTATTCTTC TATTTCCATT ACAGCTTGGT
36001 TTAAAGAAAC TATGGAAGC TACAGACTAA CCTCCTTTTC CTTTGGTTT
36051 TTTTCCATGT TATAGCAGAG AACCAGCCAG GGCCAGATT CTTGGGCTGT
36101 GTCCTCTGCA GTTGACAGG GCTCTGCTCA GAAGGGTCCC ATACTTGGCT
36151 TAATGCTCTG CTGTGAGCAT CTTGAAAATT TTTAATAATT TTATATTTCA
36201 TCTTGTTTTG TAAGTTATAA GCCCAGTGGG CCAGTGGAGG CTGTTCTAGG
36251 GGTCTGGGTT TGGCTCATGA GAGGTACATC CTTCCACCT CCCCAGGATG
36301 GGCTCTCAGC AGCTGGCTTT CTGTACCCTG GCACCCAGG CCTTCTTGG
36351 CCCCTACCCC GTGTTCACTG TTGCCCTCAC CTTGGGTGAT GACTGGGTCA
36401 CATGGGAGAG GAGGAAACCC ATGTTCTGCT GTCACCTCC ACCTCTTGT
36451 GGGTCTCTGG TACAAGCTCA GGGAGGGTTG GGATCAGGCG TCTGTGACTC
36501 ACAGTGTGTT GGGGAGTGAT GGTGTCATT TTATCCAGG CTGGCAGCGT
36551 GCTGGCATAT TGATGAGCAG CTGCTGGCAT GATGATTTGT CCTGACCTG
36601 GACCGGACTC TGTATCTTGG CTTAGTCTA GTCCACTTCT CAGCATTTCT
36651 TGGAGGCCCA CCTAACTGC AGAGACAAAG AAGAATATGC TTTGGGATTT
36701 TAAAGATGGA ACCCATATG CTATCAATTG GAAAGGAGT CAGATTCTGG
36751 CTGGGCTGAA TCACTGATTT TCCAGGCAAG TGGAACTTTA ATGACCCACT
36801 AGTGCCCTTT GTTCACTGTG GGCTGGCTGG GGAGGAAACC TTGCCTTTAA
36851 AGAACCCCTGT GCTCTTTAAA GTTTCCAGGG CACAATTGAG ATCCTTGAGG
36901 TACAGTTTCT CCATGCAGAC CTAGCACCTG CTTTAGGTAA GGGCTCTTGT
36951 TACTTCTTGT TCTTATGGG TCTTATGTT CAGCTCAGCT TCCTGCTTCC
37001 TCAGAGAGAA GTGGTAGGTT CTGTTTATAG CTTTCTTTT TTGGTGGTGG
37051 TGGGAGGTGT CAAACCGCAT TATTGAGGGG AGTGGGGGTG GTAAAGCAGT
37101 GGTGAGGACG ATGAGAAGCG ACCTCCTTAG CCAGGCGAGG AGCTCACCTC
37151 CCAGACCCCTG CCTTCAGGC ACTGAAAAC GTTTTAGGCT TTTCTGCATG
37201 GTTGGAGTTT ACTCTTAGTT GCTGACAGTC ACTCATCCCC TGGAGAGGGG
37251 TACTGAGCAT AATCACTGTT GGTATTTTAT TTAATAACAG TTCTTCATCA
37301 TTACCGAGAC TCATTCCATT TGGAAAATA ACATTGCTC ATCTGTTTCT
37351 GGTATATTTT TACACTTGGC TTTCACTCAC ATGTTGCATA TTAAGTAAAA

FIGURE 3-11

37401 AGATCAGCAT GATCTTGGAG CCTAATGTGA TCTGGATCTT ATTACCATGT
 37451 ATGTTTTTAT CGTCAGGTGC TGCTTTGGAC TCTGGCCCAT TCCTCCACC
 37501 TGTCTTCATC CTGTGGGGT TGATCTCTGC CTGGTTCCAT AGTCACTTGG
 37551 CTTTTGGAGT TTTATTTCTT CTCTAACCCA CTCTTCCCTT CCCTGTCAAA
 37601 TATAATTCTC TCATGAGCAA CTGTGCCTGA TAATCCAGT GTATAGGCCA
 37651 TAGCTCAGGT TGTTTTAATG CTTGCAAGGA AGTCTCTTCA GATTACTACA
 37701 GGGTAAAAGA ATCCATTCCC TTTC AACCTC TCATTACTTA CTGAATCAAT
 37751 TATTTATTTA CTTGTGTAAT TCACATCCAT GCTCAGGTAT GTGTTTAGTT
 37801 TACCTCTGAG ACTGTGGCTC CCTCTAGACA AGGGTCTTTG TCTGGTATTA
 37851 GTCCACTTCC TCAGTGTCTA ATTTTCATGAG GACAGAATCA GGGCAAGACC
 37901 TACTGGCTAA GACTTGCTGC TGCTCAGTT ATTTGGTTTA CTGTTAAGC
 37951 CCTTGAGCCA GGAGGTGACA GTATCTTTTG TGTTCAGT CAGATAACCA
 38001 GTAACAGTAA TATTCTGATG TAGGTCTAAG GGGCAATAGG AGCCTGAATC
 38051 TGAGCCCTT GGCAGGGATG GTTCCCTGG GTTACTGGAT TTGAGTCTTT
 38101 GTCTTCGTA ATAGTAACTT CTGTGACCTT TGGCTCAAGG AGTCTTTCT
 38151 AACCTAAATG CCTCCTGAA GAAAGTGTG ATATTTCATCA GAAAAAAG
 38201 TAGGGTTTGT GTTATGTTAC CATCTGGGAG ACATTGGCTT TAATCCTCTC
 38251 CCTCTTCTT TTCTTTTAA AATTTTCAAG AATCCCCAGA ATTGAGGGTC
 38301 AATCCTGGAT CAGAAGGGGC AGAAAAAGTCA GCCAGTCAGA GGTGAGAAAG
 38351 GGGTCTTGTG TTCCAGTTGC TCTACTTTAG AGGGCTTGAG GGGGCTTGA
 38401 GGAGCAAAAC AAATACTCTG AGGTCTAGG AGAAGATTGC TCTAAATCCA
 38451 GGATGATTTT ATCATATGAC TTGAGATGGA GGGGTTCTTG ATTAGTAATG
 38501 GGCTTTTTGA TTGGCAGGAA GTAGGTAAAC TGCAGGCAAT AGGATTGGCC
 38551 ATAGAAATAT AGGGAACCTT ATGCTTTCAA CTCTTGTAAG GTTAGGACCA
 38601 AACCAAAATTA TTTGGGGTTC ATTGGTGGCT AAGAAATTAA CTTTATACT
 38651 TATAGTTAAA AAAAAAAGT TTAAGAACT TTTATTAAT CTTCCTCAAT
 38701 AGAGTGATTT TTTTTTTTT TTAAGAGACG GAGTCTGGCT CTGTGCTCA
 38751 GGCTGGAGTG CAGTGGTGCA ATCATGGCCA CGGCTCACTG CAGCCTTGAC
 38801 CTCCAGGCT CAAGTGACCC TCCACCTCA GCCTCTGAA GTAGCTAGGA
 38851 CTACAGGCGT GCACACCAC ACCCAGCTAA TTTTGTATT TTTTGAGAG
 38901 ATGAGATTTT GTCATGTTGC CCAGGATAGT CTCCAACCTC TGGGCTCGGG
 38951 CCATCTGCCC GCCTTGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGAC
 39001 ACCATGCCCA GCCAGAATGA TTTTCTTTG TTGAATTTCT AAAATTTAT
 39051 TCTGGCTTAG GTAATTGAGT AGGAATGGCA GAGAGTAATA ATTTTCAGTG
 39101 TAATCTTTAG CATTACATAA ACCTCTACAA ACATGAAGTA AAAAGTTCT
 39151 TACAGACTTT CTATAGGAAA AATAAATGTT TATAGATCTG CTTATCAACT
 39201 GTTTGTTCTT CCTACCTCTG CATTTTCATC TATTGATAAC TGTCAGAGTT
 39251 CAAGGTCAGT TAATTGTACA TTTCTGGGA GTTTTCTCA CTGTTAATTA
 39301 GTAAGACTTT GAATCATTAA GTGCTGATGA CTACATGGCA CAATTCATTA
 39351 AAGACAGTCA TACTTTAACC TTAGTACAGC TATAATGGGA CGGTGAAATA
 39401 CAACTAGGAA AGTATCTTAT TAAAGTATTT TACATTTTAC TAATAAAAT
 39451 TATTTAAACC CTGAATTAGT GTTTATTTTT GTTTCCGAAT TCTCAGTAAC
 39501 ATCTCAGTAG ATCGTGAAT CCTGCCAAA GACGTATTTT AATCCAAAGA
 39551 TCTTTCTGCA TCTATAATTT ACCACACTAA AGCTCACATT ATCATTAAAA
 39601 GCAGCATTAT CATTAAATTG TAGACATTTA TTAGTTTCTC TCCAGGCTTA
 39651 ATGGGAGTGG TTTGGAGTAA ACCTTTGTAG AAACAATAAT ATGTTTGTAT
 39701 AAATGCATAT GGGCGTGGAG TGGTTATCAC TTACCTCTC ATGAAATTTT
 39751 TGGAAAGGTG ATCGGAAAA CCAGGACACA TTTATGGTAA GATATAACAC
 39801 CTTACCATAA CGATTAAAGG TCATTGAAAA ACTCTGACTT AATGAGTTTA
 39851 CCAAAAAACT GTTCTATCCA CATCTCATCA AACCGCCCTT GAAATTCCT
 39901 TGCTCTGTT AAATTTTCT AGACAGTCTG AATAGAGGCA TGTAAATTTT
 39951 TTGGATTTTT CTGTGGTTAA ATAAATATCC TTTACAATC TCTTTATTCT
 40001 TGAATATCCA TAAGAGTTTA TATTTATACT GTATGTTTG TATTAGGATT
 40051 CCTTTCAATT GCTATATAAA AAATGTAAAG TCTGTTTACT GCTTAAACC
 40101 TTCTGGTGTA TTTTATATA AAGTAACACC CTTAATTCTA ACTTGGCCAA
 40151 CAGGTAGGAT GGTATTATTA TTATCTTCAT TGTACAGATA AGGAACTGA
 40201 GGCTCAGATT GACTAGATCA AACAGGAGTT TTCTGGAAAA CCTAGGACAC
 40251 AAGCCTAAAT CTTTGAACCT AAATACTGCT CTACACTGAA TTACAGTTAT
 40301 ATACTGATTT CTGTTGTAAA TTCTTAGAGA AGACAGACAT AGAAATTAGT
 40351 AACTTGAGTC AGTAGCGGCT TTGTTCAAAC ACAGGCACAT GCATATTTTA
 40401 TGGTATATGT TTATATCTGT GTAATACTCA TCATAAATGT CAGATTTATA
 40451 ATCGATAGTG CCCATTCTA AATTTATAGT TGAACCTCT GATAGGAATT
 40501 AGGAATTATC TTAAAGTCT AGAATAATAA ATATTAAGAT TTTGAAGACT
 40551 GCTTAAACA GTGTTCCAGG CTGGATTTT TCTTAGTTT TTTTCTCT
 40601 AGTTTTTTAC CTTAGTTTT TCCATGTAAT GAATGAGGAG CCATTGGGGT
 40651 TGGTGTGTTG TTGTAAGGG CAGGTTGACT TCACCAGGAG GTGTTCTTG
 40701 GTATTATGAG ATCCTCTTT TCACACTAAT CCTTTGATTA GCTTCTCTT
 40751 ATAGTTTCATG CTTGTACAGT TGCAGCTGAA TGGTAAGTAG GTAGAAATAT

FIGURE 3-12

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40801 GCATTGACTA ATGTTGAACT ATATCTAGGA GCGTCATATT CATGCTACTA
40851 CTGAGCACTG TGACCTAGGT GAAGTGTGAG ATTAAGAGC TTTATTGCTT
40901 ACCACGTTTC TTTTGGATCT AGTTAGAGTC ATGTGAGGCA GTCCATGACT
40951 TTTAGGATGT TATAATATAA TCCACATAGT ACTTTATACT TTTCAATTTG
41001 TTTTATATA TTTTTCCTTA CTATAAGCCT GTCAAGTCTA GTGAGATGAC
41051 ATGGTTATTA ATATATTACA AATGAAGAAC TCTGACTTGG AGGTAGTATA
41101 GCACTGTGGT TAATAATAGA AGTTCTTATA TTTTATATG AATTATATAT
41151 TATGAACCAG ACCAGAATAC TAGCTCTACC AATTACCTAG CTGAGTGATG
41201 GTGCAGCAAC TTAATCTCTC AAAGCCCTGG TTTTCTCATT GTAAATGGA
41251 GGACCTTATA GGATTGTTGG GTAGCTTAAA TGAGATAATA GGTAGAAATTA
41301 AAAGTAACGG CAAAAACCGC AATTACTTTT GCACCAACCT GATATTTAGA
41351 ACAGTGGAGG CATATAGTAG GCATTCAATA AATATTGGTA GTATTATTTT
41401 CAGAGGTTAT TACTCATTTA ACTCAACAAA AATTGAGAGC CCCTTCTAT
41451 ACGTAGTCA TTGTGCTAGG CATCAGGAGC ACAGGGCAAA CCTGGTAGGG
41501 TGCTTACTCT GATGGAATTT ACATTTTAGT GGTAGAAATG GTAAATGAGT
41551 CAACAAGAAT TTTATGGAGT GACAAGGACT TTGAGGAAAG TAAAAACGGGA
41601 CAATGCTTGA GAAGGGTGCT AGTTGGGAAG TCCTATCACA CGAAGTGGTA
41651 TTTGATCTGA GACCTGAGTG ACCATAGCCA CATGAATACC TGGGGGAATC
41701 ACTTCCCAGG AGGAAACAGA AGCACAGAAG CCGAAAGGCA GGATCACAGG
41751 CGGCACATTT TATTGGTGCA GTGTGGAGGT AGAGGGACTG GATTGTGTAG
41801 GGTTTGTAGG CCAGGGTAAA GAGCTTGGAT TTCTTCTGAG TGTAGGATTT
41851 TTAGCAGGGG AGTGAATGCT CTTATTTTGG GCGGGCGCTA GGCCAGGTAC
41901 TGTGAAGGAA ATAATGGTAT AGAAGAAATA TGTCTTTCTT GCTAGAATCT
41951 TATGTGACAT ACAACTAGTG GTGGCTGATC AGCAATTAGA ACTGCAGTGT
42001 TCTTGCTGGT GTACTCCTAA TCTGATCATT GGATGATATT TATCACGTAT
42051 TTTTGCAGCA GTCATCTCTA AAGTGGCATT ATGGTTCTAG TTATCTATCA
42101 TTGGATCTGT TTGCTCTAAC AGTCCGAAGG GGCATGAAGG GTGGAAACAG
42151 AGTAGAGGGA AATGGGTGAA AAGGCTATTT CTAACACTA GACACAAAAT
42201 AGGGATTAGG AAGTAGTGGG GGTAGGAGA AAAAGCAAAA TCCTGTTGTG
42251 CATGGAGAGG GACATTGTTG AAAGTGTGGC TTCTTGAGAT TACATGAGTG
42301 AACCTGCGTG GACTGGGTGG TCTTCCCTAT TCACCAAGCT GAATCCAGGC
42351 CCAATCCAAG ATTACTGCTG CCTTTGCTCT GAGGCTTTAG ACTGTTAGTA
42401 GCTTTTCTCG TCTCTACTGA GGCCAAAAGG GGCAGTGATA CCTTGAATT
42451 TTCTTCTTAA AACAGGGTTT CATTTCCCTG GAAGTTTGT TCTTTGAATC
42501 TTTCTGTGAG TTAACTGTT ATCATCAATT GGTAGCATT CTAATAATAA
42551 TTATAATTAT AGTAAACATT TATTGAGTGC TTACGAAGAG CCAGTTCCAA
42601 GCTTTTTTAT CTCCATTATT CTGCTACTTT CCTTCTCATT TTACAGATGA
42651 GGAAAATGAG GCACAGAGTG GTTAATTAAT CTGTTTGAGG TCCCGTAGCA
42701 GGTCAGTGAT GCCAGGGTTC AAACCTACAC TTAACCTAC ACTAGAGACT
42751 GTTTTCTTAA TTATTCTTC ACAATCATAT GTTTAATGAT TACTTATTGA
42801 TTATTTAGTG TCTGTATAAG AAGAGGGAGC GGTGCTCTTC TGTGGAGAA
42851 GAAAGGCTGG CTGATCAAGA CACACTGGTT GGTTTGAAGA AAAAATATAG
42901 ATGTTAATTC CATAAACCCA CACTCTAAAC ATTTCTACTG GACGAGTTCC
42951 ACCTGTGTGC CACTCGAAGT CGGATGCAGT AAGGAAGGCT TTTTATTGAG
43001 GAGAGAACGA ATACTCTGT ATTCAAAAAGA GAGTGTGTTG TTCCTTATAG
43051 AAGATGGAAG GGGGCTTGCC AGTGACAGAT TATGATGATT ACCTCCTTAG
43101 TGGTTTTTTT TTATTGCACA GACTATAATA ATAATTATAA AAATTTGTAA
43151 ATCAAGAAAA ATCTTTACCC CAACAAATTG TTTTATATT TTTTATATT
43201 ATATTTTTTC ATATTCAATT TATTTTTTCA TATTCAAAAA TAAAAACAAT
43251 TTCATATTCA TTTCAATTGT TTATTTTTTC ATATTCAAAA ATAAAACAAT
43301 TTTTATATT ATTTCAATTG TTTTATTTTT TCATATTTTT CATATTTTAT
43351 ATTTTTTTCAT TTTTATACAC AGTTATAGAG TATCTACTTA TTTTTCATTT
43401 AACATTATGC TATAACAGGT TTTAAAGTTA GGCAGTAAGT CTTTCCAGTG
43451 AAAAGGAAAA GACTGAAACA TGAAAAGGTT ACGAGGCATT ACTAATTGAT
43501 TGGAATGATG CCTACCAGGC AGCCCATGTC AGTTTTGAG CTGGCCTTGG
43551 AAGGAACAGC TGTGTATTTG GACCTTGGAG CAGTCTGTCA GGCTTCCAAG
43601 AAAGTGGGCA AAGAAGGAAG GGGGGTTGGG GGCACAAGTG GAAAAGTACA
43651 GTGGTTTGA ACTGATGTGA AACTATCAAG CTGGTTGAGT TCAGTGTTAG
43701 AAAATAGGAA AAACAAAACA ATTTCTACCT GATATGGTAC TTTAATTGAG
43751 GTTAGCACTT CAGTGAATAG GCAATGCATT ATAATTTGTC AGAATTATCA
43801 ATATTTTGT TTTGTCAGTG GCTTTATATT TAATAGTTAC ATGTTATATAA
43851 GCCAGTTTGA TCAGTGAAAG AACAAAGTTC TTGACAAATG CTATTTTAGT
43901 GATAAAGCTG TTATTCIGTA TTAAATTTC GTTTAACTCA AAGTGGTTTT
43951 TAAGTTTTAC ATTTGTATAA CTGTAGACTA GCCATATGGC ATTCAAAGGC
44001 CTCCAAGATA TAACTTGAGA CACTCTTAGG ATGGAATCCC ATATTGAGAA
44051 TCTTTACTGA CAGCTCCCA TATCCAAATT GCCTTTTCTC TCTTGGGCT
44101 CTGGGTGTGA CAAGGGACAA CTTGAGTGAA AGGCCACAGG ACAAAGTAGA
44151 GATGCTGTTA AATCTCAATG CAGAAGGCT GAGACAACCT ATAGAGACAA

FIGURE 3-13

44201 TTGTTTCTCT TTTCTCCCTC ATAAAATAAG TAAAATTCAA AGTGATTTT
44251 TTTTAATTTT TTGCTTTGAC ACATTGTGTT TAGTCTGATT GAGGTCATCT
44301 TACACAACAG AATCCAAAAT CCTGAGAAAA TAATTTATAC AACTAGAATT
44351 CCAAAATTAG GTTTTGCAAT AAGTTCAAGC TATCATTTCT TTAAGAAAAAC
44401 CTACACTGGA GTTACCAACT GGAATATTTG GTTATGAGAC ACAGTCATCA
44451 TGTCAAGTA TGTAGTTTGC TTCTAACACT TATTGTGTG CTTTAAAGAC
44501 CTGCTCCCTG CCACACTTTA TCATAACAAA AAACAAGAGA CACATGTTAG
44551 TACTGTAGCA TGTATAGTCA TGGGGAATGT GTTCTAAAG AAATCCCATC
44601 ACAGTGGAGT CAACACAATA TTTCTAGGGG AGAAGGTCTT CCTGTTAAAC
44651 TCATGTGAAG GCATTCTTCT CTAATATGGG AACTTGTTTA TGTGCCCTCT
44701 AGAAGACAGC TGAGATGGTC TTCAGTGAAT CTGTTCACTG ACATGTTGCT
44751 AGTTTCTTTA TGTTTACATG TAAACAGTGC TTAGAAGCAT CTTTCCCAA
44801 GCTGTTCTTT TTTTGATGGA CTCCCCTTT TTGGGGGAGT ATCAGTTGAA
44851 TGAGCACTGT TGTACTCTCA GCACTAGACA TTCTGTTATG TGTGTGTGGA
44901 GCTTCCTTGT GGCTTGGTAG CATTACCTCT GCATTACATG CTGCAGCCTC
44951 ACCAGGCAGA AGGGCCATTTC ACTTCTGCTG CTACTTACCA GCACCTCTGT
45001 TTCCTGGAGT GTGTTACCTT CCCACCACCT GGGCCTTGGA CCTGGGTCGG
45051 TTGGGCTATT ATCCATGCTC CCACCTGCCC ATCTCTGCTC TGATATAATC
45101 TACTAGGATA ATAAAGTAGC TTTTCCCTAC CATAATGTTT TTTAAATAGA
45151 CATACAGCAA TGTATAATGG TTAAGAGCAT GATCCAACT GTGCTGTATT
45201 TTGAATCCTG GCTGAGTTAC TAGCTATGTA ATCTTGAGAA AACTACTCAA
45251 TCTCTCTGTG CCTTAATTTT CTTAGGTATA AAGCAGATAC TAATTATGCC
45301 ATCATAGGGT AGGTATGAGG ATTAAATGAG TGAGTATTTG TAAACACTT
45351 AAAACAGTGA CTGACTTGGG CTACCCCTTT TGGGTCCCTT CCTTTGTAT
45401 GGGAGCTCTG TTTTCACTCT ATTAATCTTT GCAACTTCAC ACTCTTCCAG
45451 TCTGTGTTTG TTATGGCTCA AGCTGAGCTT TCGCTGCTG TCCACCCTG
45501 CTGTTTGCTG CCATCGCAGA CCGCGCGCTG ACTTCCACCC CTCTGGATCC
45551 GGCAGGGTGT CCACTGCAAC TCTGGTCCAG CGAGGTGGTG CCCATTGCCG
45601 CTCCTAATCG GGCTAGGGG TTTGCCATTGT TCTGCAAGG GCTAAGTGCC
45651 CTGGGTTTAT GCTAATTGAG CTGAATAGAG CTGTAACACT CACTGTATGG
45701 CCCAAGGTTT CATTCCTTGG AATCTGTGAG GCCAAGAACC CCAGGTCAGA
45751 GAAGAAGAGG CTTGCCGCCA TCTTGGAAGC AGCCCGCCAC CATCTTGGGA
45801 GCTCTAAGAA CAAGGACCCC CCGGTAACAT TTTGGCCACC ATGAAGGGAC
45851 TTCCCAAAGCG GTGAGTAATA TGGGACCACT TTTGCTTGT GTTCTGCCCT
45901 ATTCTTCATT GGAATTGGAG GAAAATACCG GGCACCTGTC AGCTGGTTAA
45951 AAACAATTAG CATGGCCACC AGACTTAAGA CTCAGGTGTG AGGCTGTCTG
46001 GGAAGGGCT GTCTAACAGC CCCCACCCCT TCTGGGTTGG GAGCGTTGGG
46051 CTGTCTGGAA CCAGCTTCCA CTTTCAGTTT TCTGGGGAA GCTGAGGGCC
46101 GACTAGTCTG AGAAAGCTGT TGTCTGAAC TCTGCTGTT AGCTGGTTGA
46151 GATCATGGCG CAGCCAGAAG TCTCTACTCA ACAGTCAGCC ATGCGTGCAC
46201 CCTACCTTT CTTCTGACC TATACCTCTT GGTCTGACC ACAACTTGCT
46251 TGAAAGTGTA GCCCCAAAAT TCTCCTTACC TCTGAATCTA CTCTCTCAA
46301 TCCCTGCCCT CTAGGTAATA ATGGTTTCTA CTTTCATTTT CTCTAGCAAG
46351 CTGTATCTCC AAAGGGATCT AAGGAAGCTC TATGCTGTGT CCTTAAGCCC
46401 CTAGGCTCTG AACCCAGATA GTCTTGTCCC TGGTGTCCCT CCAATTTAG
46451 GCATACAGCT CTCACATGAG GCAGTTATGT AGGACCTGTT CCCCACCATC
46501 CTTGCCAGGG TCCCAGGTTT GTAAAGGGCT AGGAGAAGAG AGAGAGAGAG
46551 AGAGACAGAG ACAGAGGGGA GAGAAAGAGA GAGAGACGAA GAGGAGTCA
46601 AAGAGAAAAA GAAAGAGAAA GATAGAAGTA GTAAAGAAAA AATAGTGTGC
46651 CCTATTCTTT TAAAAGCCAG AGTAAATTTA AAACCTATAA TTGATAATTG
46701 AAGGTCTTCT CTTGACCTTG TAACACTCCA ATACCACTTT ATTGTCACTG
46751 TAAACAAGGG GGTAGCCCAA AAACACTGAG ACCACTGACA ACCTATCAA
46801 ATCTATCAA AAATCCGTAA CCCAGTAACA CGTGGATGGG CCAAAGGCAT
46851 TCAGTCGGTA GCGGCAACTG CTTTGCTAAA AGTAGAAAAA TAACTTTAGA
46901 GGAAACCTCA TTGTGAGTAC ACCTCACCAG TTCAAAACTA TCCTAAGTCA
46951 AAAAAGCAAA AAGGTAACCT ACTAACTCGA AAATCTTAAA ATATGGGGCT
47001 CTTCTGTTAG AATAAAGGTA ACTTATTAAC CACTGAAAAAT TCCCTTAACC
47051 CAGCAGATTT CCTAACAGGG GATTTAAATC TTAATTACCA TACAAAGGTC
47101 CGACAGATCT AGGAGGAACT CCCTTCAGGA CAGGATGATA GATGGTTCTT
47151 CCCAGGTAAT TGAGGGAAAA AACCACAATG GGTATTTAGT AATTGATAGG
47201 GAAACTCTTG TAGAAGCAGA GTTAGGAAAA TTGCCTAATA ATTGGTCTGC
47251 TCAAAACATG GAGCTATTTG CACTCAGCCA AGCCTTAAAG TGTTTACAGA
47301 ATCAAAAAAA CTCAATCTCA ATCCTGACTC AAAAGGTTAC CTACACCTC
47351 TCTGAAATGA ATTTGCATAA GAAGTGTGT TTATGGGAAT GCATCTTGAT
47401 GGGGCAACTG GGTGTGTATG AAATACTCAG GAACCCAGCC CAGCTCCAGG
47451 ACTCACCCCT GAGCAAAAAA GCAATGTTGG GCATCTGGT AAAGGACCAC
47501 TAGAATCCAG CAGCCTGGAC CCCTTTCTTT GTGGTCAAGA AAGGCAGGAA
47551 AAGGGGTGCA GGACTGCTAC ATCAGTGAGT GCAACTAATC TGATAAGCAG

FIGURE 3-14

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47601 AGGTCCATGG GTGGTTACAC ACCCTGGAAA GGAATAAACA TTAGGACCAT
47651 AGAGAACGCT CTAGGACTAA TGCTCATTGG AAAATGACTA GGGGTGCTGG
47701 CATCCCTATG TCCTTTTTC AGATAGGAAA TGTTCCCCC AAGGCAAAAA
47751 TGCCCGTAAG ATATATTCTG GAGAATTGGG ACCAATTTGA CTCTCAGATG
47801 CTAAGAAAGA AATGACTTAC ATTCTCTGCG AGTACCACCT GGCCATGATG
47851 TCCTCTTCAA GGGGGAGAAA CCTGGCCTCC TGAGGGAAGT ATAAATTATA
47901 ACACCATCTT ACAACTAGAC CTCTTTTGTA GAAAAGAAGG CAAATGGAGT
47951 GAAGTGCCAT ATGTACAAAC TTTCTTTTCA TTAAGAGACA ACTTGCAATT
48001 ATGTAAAAAG TATGATTAT GCCCTACAGG AAGCCCTCAG AGTCTACCTC
48051 CCTAACCTGA TGTCCCCCTG ACTCCTTCCC CAACTAATAA GGACCCCTCT
48101 TTCAACCCAA ACAGTCCAAA AGGACATAGA CAAAGGAGTA AACATGAAC
48151 CAAAGAGTGC CAATATTCCC TGGTTATGCA CCCTCCAAGC GGTGGGAGAA
48201 GAATTGGGCC CAGCCAGAGT GCATGTACCT TTTTCTCTCT CACACTTGAA
48251 GCAAATTAAT ATAGACCTAG GTAAATTCTC AGATAACCCCT GATGGCTATA
48301 TTGATGTTTT ACAAGGATTA GGACAATCCT TTGATCTGAC ATGGAGAGAT
48351 ATAATATTAC TGCTAAATCA GACGCTAACC TCAATGAGA GAAGTGCTGC
48401 CATAACTGGA GCCCGAGAGT TTGGCAATCT CTGGTATCTC AGTCAGGTCA
48451 ATGATAGGAT GACAACGGAG GAAAGAGAAC GATTCCCCAC AGGGCAGCAG
48501 GCAGTTCCCA GTGTAGCTCC TCATTGGGAC ACAGAATCAG AAGATGGAGA
48551 TTGGTGCCGC AGACATTTGC TAACTTGCGT GCTAGAAGGA CTAAGGAAAA
48601 CTAGGAAGAA GCCTATGAAT TATTCAATGA TGTCCACTAT AACACAGGGA
48651 AAGAAAGAAA ATCCTACCAC CTTTCTGGAG AGACTAAGGG AGGCATTGAC
48701 AAAGCATATC TCTCTGTAC CTGACTCTAT TGAAGGCCAA CTAATCTTAA
48751 AGGAAAAGTT TATCACTCAG TCAGCTGCAG ATATTAGAAA AAAACTTCCA
48801 AAGTCCGCCT TAGGCCGGA GCAAAAGTTA GAAACCTAC TGAACCTGGC
48851 AACCTCGGTT TTTTATAATA GAGATCAGGA GGAGCAGGCA GAATGGGACA
48901 AATGGGATAA AAAAAAAG GCCACTGCTT TAGTCATGGC CCTCAGGCAA
48951 GCGGACTTTG GAGGCTCTGG AAAAGGGAAA AGCTGGGCAA ATAGAATGCC
49001 TAATAGGGCT TGCTTCCAGT GCGGTCTCAA GGCACTTTA AAAAAGATTA
49051 TCCAAATAGA AATAAGCCAC TCCCTTGTC ATGCCCTTA TATCAAGGGA
49101 ATCACTGTAA GGCCCACTGC CCCAGGGGAC GTAGGTCTC TGAGTCAGAA
49151 GCCACTAACC AGATGATCCA GCAGCAGGAC TGAGGGTGCC TGGGGCAAGC
49201 ACCAGCCCAT GCCATCACCC TCACAGAGCC CTGGGTATGC TTGACCATTG
49251 AGGGCCAGGA GGCTAACTGT CTCTGGACA CTGGTGTGGC CTTCTCAGTC
49301 TTA CTCTCT GTCCCGACA ACTGGCCTCC ATATCTGTCA CTATCCAGG
49351 ACAGCCAGTC ACTAGTACT TCTCCAGCC ACTAAGTTGT GACTGGGGAA
49401 CTTTACTGTT TTCATGCT TTTCTAATTG TACCTGAAAG CCCCCTCCC
49451 TTGTTAGGGA GAGACATTCT AGCAAAAGCA GGGGCCATTA TACACCTGAA
49501 CATAGGAGAA GGAACACCCA TTTGTTGTCC CTGCTGGAG GAAGGAATTA
49551 ATCCTGAAGT CTGGGCAACA GAAGGACAAT ACGGATGAGC AAAGAATGCC
49601 CATCTGTTC AAGTTAACT AAAGGATTCT GCTCCTTTC CTAACCAAAG
49651 GCAGTACCCC CTTAGACCGG AGGCCACCA AGGACTCCAA AAGATTGTTA
49701 AGGACCTAAA AGCCCAAGGC CTAGTAAAAG CATGCAGTAG CCCCTGCAGT
49751 ACTCCAACCT TAAGAGTACA GAAACCAAC AGACAGTGA GGTTAGTGCA
49801 AGATCTCAGG ATTATCAATG AGGCCATTGT CCGCTCTATC CCAGCTGTAC
49851 CTAATCCTTA TATTCGCTT TCCCAAATAC TAGAGGAAGC AAAGTGTTT
49901 ACAGTCTGG ACCTTAAGGA TGCTTTTTC TGCACTCCTA TACATGCTGA
49951 CTCTCAATTC TTGTTTGCT TGAAGATCC TTGAAACCCA ACATCTCAAC
50001 TCACCTGGAC TGTTTTACCC CAAGGATTCA GGGATAGCCC CCATCTATTT
50051 GGCCAGGCAT TAGCCCAAGA CTTGAGCCAG TTCTCATACC TGGATATTCT
50101 TGTCTTTGG TATGCGGATG ATTTACTTTT AGCCGCCCGT TCAGAAACCT
50151 TGTGCCATCA AGCCACCCAA GTGCTCTTAA ATTTCTCTGC CACCTGTGGC
50201 TACAAGGTTT CCAAAACCAA GGCTCAGCTC TGCTCACAGC AGAGGGCTAT
50251 TTATCCCTAA ATACTTAGGG CTAAAATTAT CCAAAGGCAC CAGGGCCCTC
50301 AGTGAGGAAT GTATCCAGCC TATACTGGCT TATCCTTATC CCAAAAACCT
50351 AAAACAACCTA AGAAGGTTCC TTGGCATAAT AGGCATAACA GGCATAACAG
50401 GTTTCTGCTG AATATGGATT CCCAAGTACG GCAAAATAGC CAGACCATTA
50451 TATACACTAA TTAAGGAAC TCAGAAAGCC AATACCCATT TAGTAAGATG
50501 GACACCTGAA GCAGAGGCAG CTTTCCAGGC CGTAAAGAAC ACCCTAACCC
50551 AAGCCCGAGT GTTAAGCTTG CCAGCGGGGC AAGACTTTTC TTTCTATGTC
50601 ACAGAAAAAA TAGGAATAGC TCTAGGAGTC CTTACACAGG TCCGAGGGAC
50651 CAGCTTGCAA CCCATGGCAT ACCTGAGTAA GGAAATTGAT GTAGTGGCAA
50701 AGGGTTGGCC TCATTGTTTA CGGGTAGTGG CGGCAGTAGC AGTCTTAGTA
50751 TCTGAAGCAG TTAATAAAT ACAAGGAAGA GATCTTACTG TGTGAACCTC
50801 TCATGATGTG AACCGCATAC TCACTGCTAA AGAAGACTGG TGGCTGTGAG
50851 ACAACTGTTT GCTTAAATAT CAGGCTCTAT TACTTGAAGG GCCAGTGCTG
50901 TGACTGGCAA CTTGTGCAAC TCTTAACCCA GOGACATTTT TTCCAGACAA
50951 TGAAGAAAAG ATAGAACAGA ACTGTCAACA AGTAATTGCT CAAACCTAAG

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FIGURE 3-15

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51001 CCGCTTGAGG GGACCTTCTA GTGGTTCCCT TGACTGATCC CAACCTCAAC
51051 TTGTATACTG ATGAAAGTTC CTTTGTAGAA AAAGGACTTC GAAAAGCAGA
51101 GTGTGTAGTG GTCAGTGATA ATGGAATACT TGAAAGTAAT CCTCTGACTC
51151 CAGGAACTAG TGCTCAGCTG GCAGAACTAA TAGCCCTCAC TCAGGCACTA
51201 GAATTAGGAG AAGGAAAAAG GGCAAATATA TATACAGACT CTAAGTATGC
51251 TTACCTAGTC CTCATGCTC ACAGCAAT ATGGAGAGAA AGGGAATTCC
51301 TAACTTCTGA GGGAAACCCCT ATCAAACATC AGGAAGCCAT TAAGAAACTA
51351 TTATTGGCTG CACAGAAATC TAAAGAAGTG GCAGTCTTAC ACTGCTGTAA
51401 GAAAGGACAG AGAAATAAAA GGGAAACGCC GAGTGGATAT TGAAGCCGAA
51451 AGAGCCACAA GGCGGGACCC TCCATTAGAA ATGCTTATAG AAGAACCCT
51501 AGTATGGGGT AATCCCCCTC AAGAAACCAA GCCCCAGTAC TCAGAAGAAG
51551 AAATAGAATG GGAAACCTCA TGAGGACGTA GTTTCCTCT CAGGATGGCT
51601 AGCCACCAAA GAAGGAAAAA TACTTTTGCC TGCAGTAAC CAATGGAAT
51651 TACTTAAAC CCTTCACTTA GGCATTGATA GCACCCATCA GATGGCCAAA
51701 TCATTATTTA CTGGACCAGG CCTTTTCAAA ACTATGAAGC AGATAGTCAG
51751 AGCCTGTGAA GTGTGCCAAA AAATAATCCC CTGCACTTCA GGCCATGCAT
51801 TTCAATCCCT GAATCTTTAA CCTCCTTGTT AAGTTTGTCT CTTACAGAAT
51851 TGAAGCTGTA AAGCTACAAA TGGTCTTCA AATGGATCCC CAGATGCAGT
51901 CTATGACTCA AATCTACCGC GGACCCCTGG ACCGGCCTGC TAGTCCATGC
51951 TTCGATGTTG ATGATATCAA AGGCACCCCT CCCGAGGAAA TCTCAAGTGC
52001 ATGACCCCTA GTTGACCCAG TTCAGCAGGA AGCAGTTAGA GCGGCCGTTG
52051 GCCAACCTCC CCAATAGTAC TTGGGTTTTT CTGTTGAGAG GGGTTGCTGA
52101 GAGACAGGAC TAGCTGGATT TCCTAGGCGG ACTAAGAATC CCTAAGCCTA
52151 GCTGGGAAGG TGACTGCATC CACCTTTAAA CACGGGCTT GCAACGTAGC
52201 TCACACCCGA CCAATGAGGT AGTAAAGAGA GCTCACTAAA ATGCTAATTA
52251 GGCAAAAAACA GGAAGTAAAG AAATAGCCAA TCATCTATCA CCTGAGAGCA
52301 CAGGGGGAGG GACAATGATC AGGATATAAA CCCAGGCGTT CTAGCCGGCA
52351 ACGGCTACCC TCTTTGGGTA CCTCCCTTT GTATGGGAGC TCTGTTTTCA
52401 CTCTATTTAA TCTTGCAACT GCACAAAAAC CAAACCAAAC CAAACCAAAC
52451 AAACAAAAAA ACAGTGAAGT ACTTATGGTA AACATTATAT AAGCATAAAG
52501 TAAACCAAAT ACTTTTTTTC TAATTATAAA AGTCCTACAC TAACATTGCA
52551 GAAACTTGA GGAATTCAGA AAAGTTATTA CTTAGTAAGA GTTGGAATGA
52601 ATAAATAAGT GGGTAGTTAG GATGCGAGGC ATGTGTTTTA GGCAGAGAGA
52651 TACAAGATAA AGAACTAAAA CTAGAATCTG GTCCTTGAAC CCTTGGCCTG
52701 ATTGCTTAT TATCATGAT GATTGCTTA TTTTCCAAT TTCTAAATCA
52751 TTCTCTGCT GTTGACAAAG CAATAAATTG TTATATTGTA TAAGTGAATC
52801 TTCAGAGAAC TGGCCTTGAG CCAGCTCTAC AACTAACCAG CTCTGTGGCC
52851 CTTTGAGAAA TTTCTTAATA TTTGTAAACC TCAGCTTTCC TACCAGTGAA
52901 ATGAAGTTAG TCCTCCCTGT CCTGCAGGGT TGCTGCAAGG ATTTAACAAC
52951 ATGTATATG TCAAAACCACT TAGTCCTGTG CTTGGCCTAT TTGGTGCTTT
53001 TTTTTTTTCT TTTTTTTAAG ACAGGGTCTT GCTTGAATCT TGCTGAGGCT
53051 GGATTCAAAC TCGGGGCTC AAGTGATCCT CCTGCCTCAG CCTTCCAAGT
53101 AGCTGGGACT ACAGGCCTGC ACCACTGTGC CTGGTGGCAG TGCTGTTGA
53151 ATGTTCTTTT TCCTTAGTTC CTTCCTAGCT CTTCTGACAG TTTTGGGCT
53201 TATGTATATA AGAAGGACTT GGTGCTCA GGGAGAGAGG ATGCAGTAGA
53251 GTTACATAGC TCACTCACA TCCTCCAAAA GCTGAATTCA TAAGTAAACA
53301 AAGTGAGCAT TTCACCCATA CTTTACACAA AGTCTAGAAT ATTTATGGTG
53351 TCCATCAGGC TCACATACTG TGACCTTCTG AGATACTTTT CCTCTCCAT
53401 TCCCTTTCTT TCCTCCTGCT GGCTTTTTTT TTCTCTCTTC TTCTTTTTTT
53451 TTTTTTTTTA CTGTGAAAAA CAACCTATAT ACAGAATAGT ACAAAAAACAT
53501 AOCGTATAG TTTGAAGAGT AATTATTAAC AGTCTTATTA AGAAACAATG
53551 CTCCATCCAT GTTACTGCAA AAGACATGAC CTTATTCTTT TTCTTCTTAA
53601 TTTTTTTCTT TTTCTTTCTT TATTTTGCC CTTTTTTCTA TCTAGACCTG
53651 CAGAGATCTT GTTCTTTTTT TGAGACAGCA TCTCGCTCTG TCACCAGGCT
53701 GGAGTTCACT GCGGTGATCT CGGCTCACTG CACCTCTGCT CTCTGGGTT
53751 CAAGTGATTC CCCTGCCTCA GCCTCCTGAG TAGCTGGGAC TACAGGCGCG
53801 TGCCACCACA TCCAGCTAAT TTTTTTATTT TTAGTAGAGA CTGGGTTTCA
53851 TCATGTTGGC CAGGATGGTC TCAATCTCTT GACCTGGTGA TCTGCTGCC
53901 TCGGCCCCCA AAGTGCTGG AATTACAGGC ATGAGCCACC ACGCCAGCC
53951 GATCTTGTTT TTTCTTATGA CTGTGTAGTA TTCCATGGTA TATATGTACC
54001 ACATTTTCTT TATGCTATCT ATCATTGATG GGCATCTAGG TTGATTCCAT
54051 GTCTGCTATT GTGAACAGTG CTGCAGTGAA CATTACAGTG CATGTGCTT
54101 TGTGGTAGAC TGCTTTATAT TCCTCTGGGT ATATGCTCAG TAATAGGATT
54151 GCTGGATTGA ATGGTAGTTC TTTCTTTAGC TCTTTGAGGA TACTGCTTTC
54201 CACAATGGTT GAACTAATCT ACACTCATACT AGTATATAAG CATTCCTTTT
54251 TCTCTACAA CCGCCAGCA TCTGTACTT TTTGACTTAT AGGTGGGAGC
54301 TAAATGATAA GAACTATGA ATGTAAAGAA GGAAACAGAC ACTGGGATCT
54351 ACTTGAGTGG GAAGAGTGGG AAGAGGGAGA GGAGCAAAAA AGATAACTCT

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FIGURE 3-16

54401 TGGTTACTAA GCTTAATACT TGGACAATGT AATAATATGT ACAACAAACC
54451 CCTGTGACAC ATGTTTATCT ATGTAACAAA CCTTCACATG TACCCCTAAA
54501 CCTAATTTTT TTTAAAAGAA ACAGAATGCC AGCCAGGCAT AGAGGCTAAT
54551 TGCTCTAAT CCCAGCACTT TGGGAGGGTG AGATGGGCAG ATCACTTGAG
54601 CCCAGGAGTT TAAGGCCAGC CCAGGCAACA TAGCAGAAC CCATCTCTTC
54651 AAAAAGTACA AAAATTAGCT GGGCATGGTG GTGTGCACCT GTAGTCCAG
54701 CCCCTTGGGA GACTGAGCTG GGAGGATGGC TTGAGCCCAG GAGGTCAAGG
54751 CTGCAGTGAG CTGTGATCAT GCCACTGCAC TCCAGCCTGG GCGACACAGC
54801 AAGACCCTGT CTCCAAAAAA AAAAAGAAAA GGAACAGAAT GTTACCAGCC
54851 CAACCTGCACT TCTTCACTCC CCCACCACTC TAATGAAGTC ATCACTAACC
54901 CACTTCTAAA GTACTCACAT ACCCTATGTC TATGGAGGTA TGTCAGTGGA
54951 GGCTAAGGTA TGCCAGTGGG GGCTTATGTA CCTTATGTCT AAATATTTAA
55001 AGTTATTTAA TTAaaaaaacc ATTAAATAT GCTTTCTACC TTGACAAACC
55051 TTTATAACAA AATTAGAAAA TGTTTAATGT TATGGCATT AATAATTGAA
55101 AGCAAAATAT CAAAGATGAT AGAATTTAAT TAATTTATTT ATTTTATTTT
55151 ATTTGAGAGA GGGTCTTTCT GTGTCACCAA GGCTGGAGTG CAGTGATGCA
55201 ATCATGGTTC ACTGCAACCT CAACCTCCCG GGCTCCAGTG ATCCTCCGCG
55251 CTCAGCCTCC CAAGTGGTTG GGACTACAGA CATGTGCCAC CAAATCCAGC
55301 TAATTTTTTAA ATTGTTTTTA ATAGAGGTAA GGGTCTCACT ATGTTGCCTA
55351 GGCCAGTCTC GAATTCAGG GGCTCAAGGG ATCCTTTTGC CTTGTCTCTC
55401 CAGAGTGCTC GGATTTAAGT TGGGAGCCAC TATACCCACC CAACATAATT
55451 CAATTATTTA ATATTTTACA TGTTTtagTA TTCTTTGAT AGGGATGTGA
55501 TGTTTGGGTG AATAATAAAG TAAATCAAAG ACATATATTT GAAAATTATG
55551 TAGTTATTCT AAAAAATTAA TTATTTACCT TTATTTTAGC AAAATCAGTG
55601 TGTTAGCATA ATCAAGATAT TTTGGTATTC TAGTAACAAG ATCTAGTCAC
55651 AGTAAGATG TAAAGATTAA AAAATAAAAT ATAATAGGAA CCAGTATAAA
55701 CAAGTGAAT TTAATTTTAA AATGCAATAC CAGCTGGGTG CGATGCCCTCA
55751 CGCCTGTAAT CCCAGCACTT TGGGAGGCCA AGGCAGGCGG ATCACCTGGG
55801 GTCAGGAGTT CAAGACCAGC CTGACCAACA TGGAAAAACC CCATCTCTCC
55851 CAAAAATACA AAATAAGTTG GGTGTGGTGG TGCATGCCCTG TAATCCAGC
55901 TACTCGGGAG GCGGAGGCAG GAGAATCACT TGAACCAGGG AGGCAGAGGT
55951 TGTGATGAGC CGAGATCACA CCATTGCACT CCAGTTTGGG CAACAAGGGC
56001 AAAACTCTGT CTCAAAAACA AAAAGAAACA AAAAACACAG TACCATTTAC
56051 ATTAGCACCC CTCAAAAATGA AATACTTAGG TATAAATCCA GCAAAATAGG
56101 TATAAGAGAT ATATAAGTAA AACTATAAAG CTCTGATGAA AGAAATAAAA
56151 GAACCAATA AATGGACAGA TATTCATGT TCATGGATAG GAAGACTCAG
56201 TAATGTCAAG ATGTCAGTCC TTTTCATCTT TATCTATAGA TTCAGTACAC
56251 TTCCAATCAA AATCCCCGCT AGTTATTTTG TGGATATTGA CAAACTGATT
56301 CTAAAGTTTA TGTGGACAGG CAAAAGACCC AAAATAGGTG ACATGCTATT
56351 GAAGCAGAAT AAAGTTAAAG TCTCTACTTC TTCTTCAATA TCATTTTCTT
56401 CAATATCAAA TCAACTCATT TTCTTCAATA TCAAGTCAAC TGTAGACTGA
56451 CAGTGTCTTA CTTCAGACT TACTGTAAAG CTACAGTAAT CAGAACAGTA
56501 TGGTATTGGT GAAAGAATAG ACAAAACAGAT CGATGGAACA GAATAGAGAG
56551 CCCAGAAATA GCCCAGACA AATACAGTTA ATCTTTGACA AAGGAGCAAA
56601 GGCAATAGAA TGGAGGAAAG ATACCCCTTT CAACAAATGC TGTGGAATA
56651 ACTGGATGTC CACATGTAAG AAAATGAATC TAGACACAGA CCTTACACCC
56701 TTCACAAAAA TGAACACAAA ATGGATCATC AACCTAGACA TGAACACAA
56751 AACTATACAA ATTTCTGCTC TGTGAAAGAC AATGTCAAGA GAATGAGAAG
56801 ACTTGGAAAA TATTTGCAAA AGACACATCT GATAAATGAT TCTTATCTAA
56851 AATATATAGG AACTCTTAAA ACTGAACAAT AAAAAAGAAA CCTGATTTTA
56901 AAATGTGCCA AACACTCTAA TAGATATCTC ATCAAAGAAG ATATATAGAT
56951 GGCAAAATAG CATATGCAAA GATGCTCCAC ATCATAGGTC ATCAGAAAAA
57001 TGCAAAATTA AATGATGAGA TTCTACTACA CACTTATTAG AATGGCCAAA
57051 ATCCAAAACA CTGACAACAC CAAGTGCTGG TGAGGATGTG GGACAACAGG
57101 AACTTTTCAAT TATTGCTGGT GGGAAATGCA AATGGTATAG CCACCTTGGG
57151 AGACAGTTTG CAGTTTCTTA CAAAATTAAG CACACTCATC ATATGATCCA
57201 ACAATTGCAG TCCTTGATAT TTACCCAAAG GAGTTGAAAA CTTATATTCA
57251 CACAGAAACC TGCACATAGT TGCTTACAGC AGCTTTATTTC ATAATTGCCA
57301 AAACCTTGAA GCAACCAAGA TGTCTTCAA TAGGTAATG AATAAATAAA
57351 CTGTAGCATA TCCAGAAATG GAGTACTCAG TGCTAAAAAG GAATGAGGTA
57401 TCAAGCTATG AAAAGACATG GAGGAACCTT TATATTTTAA TTTTATTAGA
57451 GACAGGGTCT TGCTCTGTCA TCCAGGCTGG AATGCAGTGG CACAATTATG
57501 GCTCACTGTT GCCTTGACCT CCTGGGCTTG AGCTCTCTTC CTGCCTCAGC
57551 CTCCCAAGTA GCTGGGACTA CAGGTGCATG TCACCACACC TGGCTAATTT
57601 TTTTTTTTGA GAGATTGGGT CTGCTGTGTG TGCCAGGCT GGTTTTGAAC
57651 TCCTGGGCTC AAGTGATCTT CCTGCTCAG CCTCCGAAG TGCTGGGATT
57701 ATAAGTGTA GCCACTATGC CTGACTTTTT TTTAAATTTA TTTTCTTCT
57751 AGAGCAAGG CCTTGCTTTT TATTGCCAG GCTGGAGTGT AGTGATGCAG

FIGURE 3-17

57801 TCATAGCTCA CTGTGGCCTC AAGATCCTGG GCTCAAGTAG GAGCCAGCT
57851 AATTTTTTTT AAAATTTTTT TAGAGATGGA GCCTTGCAAT GTGGCCCATG
57901 CTATGGAGGA AACTTAAATG CATATTTCTA AGTGAAGAAG CCAGTCTGAA
57951 AATGTTATAT ACCATGGGAT TTCAACTATA AGACATTCTG GAAATGGCAA
58001 AACGAAGGCA ACAATAAAAA GATGAATTGT CAGGGAGTTG GTCAGGGGAG
58051 AATGAATAGG TGGAGTACAG AAGATTTTTA GGGCAGTGAA ATGTCTCTGA
58101 TACAGTAATG GTGGACACAC GTTGTATATT TGTCCAAATC CATAGATTCT
58151 ATAATACCAA CAGTGAACTT TAATATAAAC TATGGACTTT GGGGCTGGGC
58201 ATGGTGACTC ATGTCTGTAA TCCCAACACT TTGGGAGGTC AAGATGGGAG
58251 GATCACTTGA GGCCAGGAGT TTGAAACCAAG CCTGGTCAGC ATTGTGAGGC
58301 CCTATCTCTA CAAAAATAAG GAAACCATGG ACTTTGGATT ATAATGATGT
58351 TTCAGTGTAG GTTCTCAGT TATAACAAAT GTACTACTCT GGTGGGGGAT
58401 GTTTATAATA AAGGAGGCAA TGCATGTGTT GGGGCAGGAG GTATACGAGA
58451 AATCTGTTTA CCTTCTCTA AATTTTACTG TGAATCCAAA ACTGCTCTTA
58501 AAAAAAAGG TCTTAAAAAA TAAAATTATA TTTGAGGGAA AATATTTGAA
58551 TTATTATTAT TATTTTCTTT TTGAGACGGA GTCTCTCTCT GTCCCCCAGG
58601 CTGGAGTGCA TTGGCAGCAT TTGGCTCAC TGCAAGCTCT GCCTCCCGGG
58651 TTCACGCCAT TCTCTGCTT CAGCCTCCTT AGTAGCTGGG ACTACAGGGG
58701 CACGCTGCTA TGCCCGGCTA ATTTTGTGTA TTTTATAGTAG AGATGGGGTT
58751 TCACCGTGTT AGCCAGGATG GTCTCGATCT CCTGACCTCG TGATCTGCCC
58801 GCCTCAGCCT CCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCGCCTG
58851 GCCTATTGTA ATGATTTTGA TCAAAGATGT AAATTA AAC AAATGTAAAA
58901 ATAAAAAACA AATCACTGTC TGATTCTATT TGTATAAATG TCTAGAAAAAT
58951 GCAAACCTAAC TTATAATGTC AAACCTACTCT ATAGATCAGC AGTTGCCTGG
59001 AGGCAAGAGG GAAGAATTGC AGTGAGGTAT GATAAACTT TTGGGGTAAT
59051 AAATATATTTC ATTATCTTGA TTGCAGTGAT GTTGGCACAG GTACATCCAT
59101 ATGTCAAGAT TTCTGTGTA ATACTTTATG TAGTTTATTG CATAACAATT
59151 CTATAAAATT AAAAATCATA AAATTTTGTG TGTTTTAAAA ACATTCTTTC
59201 TTTCTTTTTT CCTGAGACGG AGTCTCCCTG TATCACCTAG ACTGGAGTGC
59251 TGATTGCAGC CTTGACCTCC TAGGCTCAAG TGATCCTCCA GCCTCAGCTT
59301 CCTAAGTAGC TGGTACACACA CAGGCGCATG CCACCACACC CATATAATTT
59351 TTAAATTAGT TTTTGTAGAA ATAGGGTCTT GCCATGTGTC CCAGGCTGGT
59401 CTTGAACCTC TGGGCTCAAG CAATCCTCCA TCTTGGCCTC CCAAAGTGCT
59451 GAAATTACAG GTGTGAGCCA CTGCACCTGG CCATCTTAAT TTTTAATATT
59501 TAAAAGAAAA GTAAGGGCCA GACACTGTGG CTCTCACCTG TAATCCAGC
59551 ATAAGACCAG CCTGGGTAAC ATGGCAAGAC CCCATCTCTA TCAAAAATTG
59601 AAAAAATTAAC TGGGCATGGT GGTGGCCTGT GGTCCAGCT ACTCAGGAGG
59651 CTGTAGCTGG AGGATCACTT GAGCCTAGCA CGTTGAGGCT GCAATAAGCC
59701 ATGTTTGCAT CACTGCCTC CAGCTTAGAT GAGAGAGTGA GACCCTGTCT
59751 CAAAATAAAT AGATAGATAA TATATGTGCT AGTTTTTAAA ATATATTATT
59801 AAGATAAAAA GCAAGCCAAG ACAATTAAGT GGGGGAAGAA TAGTTTTTCC
59851 AACAAATGTT GCTGGAACAA CTGCATAGCC ACAGGAAAAA GAATGAAGTT
59901 AGATCCCCCTA CCTCACACCA TATAAAAAAA TAACTCAAAA TGGAATTAAG
59951 AOCTAAGTAT AAGCTGAGAC AAGAAGATTA CTTGAGGCTT GGAGTTCAAG
60001 ACCAGCCTGG GCAACATATT GAGACCTCGT CTCTTAAAAA AGAAAAAAA
60051 TCAGCCGGGC ATGGCAGTGT GTACCTGTAT TCCTAGCTAC TCAGAAGGCT
60101 GAGGCCAGAG GATTGCTTGA GCCCAGGATT TAGAGGCTGC AGTGAGCTAT
60151 GATTGCACCA CTGTACTCCA GCCTGGGTGA CAGAGTGAGA CCTTGTCTGC
60201 GATCAACCTC TGTAAGGTA TAAATGTTTG TAAATGTTTG TGGCCTTGGA
60251 TTAGGCAATG GTTTATTAAA TATGACATTA AAAGCACAAA CAACAACAAA
60301 ATAGATTAAT TGGACTTCAT CAAAATTAAA ACCTCTGTGC TTCAAAGGGC
60351 ACACCAAGAA AGTGAAAAA GAATCCACAC AATGGGAGAT AATTTTTTGC
60401 AAATCATGTA TTTTACAAGA CTGGTGTCCA GAATATATAA AGAACACTTG
60451 CAACTCAGCA ATAAAAAGAC AAGTAACACA ATTTAAAAAT GTTGAAAGGA
60501 TTTGAATAGA CATTTCTTCA AAGAAGACAT ATAAATCACC AATGAGCATA
60551 TGAAAAATGTA CTCAACCTCA TTGGTCATTA GAGAAATGCA AATAGAAGTC
60601 ACACCCATTA GGTGGCTAA AATAAAAAAA GATGAACAAT AACAAATGTT
60651 GGCAAGTATG TGGAAAAATT AGAACCTTCA TACACTGTGG ATGGGAATGT
60701 AAAATGGTGC AGACACTTTG GAAAGTTGGC TATTCTCTAG AGATTTACCA
60751 CATGGCACAG CAATTCTACT TTTAGGTGTA TACCCAAGAC AATTAAAAAG
60801 ATATATACAG GCCGGGCGCG GTGGCTCAAG CCTGTAATCC CAGCACTTTG
60851 GCCAAGGTGG GTGGATCAG AGGTCAGGAG ATCGAGACCA TCTGTGCTAA
60901 TACAGTGAATA CCCCATCTCT ACTAAAAATA CAAAAAATTA GCTGGGCGTG
60951 GTGGGGGGGC GCCTGTAGTC CCAGCTACTC GGGAGGCTGA GGCAGGAGAA
61001 TGTGCTGAAC CCGGCAGGCG GGGCTTGCAG TGAGCCGAGA TTGCGCCACT
61051 GCACTCCAGC CTGGGCAACA GAGCGAGACT CCGTCTCAAA AAAAAAAAAG
61101 ATATATACAC AGAAAAACTT GTACATAGAT GTTCATAGTA GTATTCCAAT
61151 AAACATGCCC ATCAGTAGAT GAATGGATAA GCAAAACGTG GTGTATTAAT

FIGURE 3-18

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61201 AAATGAAATA TTATCCAGCC ACAAAAAGCA ATGAAGTACT GATACATGAT
61251 CCAATATGGA TGGACCTTGA AAACATATACT AAATGAAAGA AACCCAGCCAC
61301 AAAAGGCCAC ATAGTACATG ATTACATTTG TATAAAATGT CCAGAATTAG
61351 CAATTCCATA AAGACAGAAA GTAGATTAGT AGTTGCCAAG GGCTGAGGGA
61401 AGGAGGAATG GGAGTGACTG CTAATGGGTA CAGGGTTTCT TTTTGGGGTG
61451 AGAAAAGTGT TCTGGAATTA CATAATGATG ATAGTTGTAC AACTTTGTGA
61501 ATATACTAAG ACACACTGAA TTGTATCTTT TAAAAAGTGA AATTTTATGG
61551 TATGTGAATG ATACCTCATT AAAATAGTTA CATGAGAAAA AAATCAAAGG
61601 CAAAATACAG AGTATAATTG AAGTATTTTA ATTTTAAAT ATAAAGTATT
61651 TATAGCCAAA TTTGATTAC TTCTAAAATG TCTTATTAAA TAGTTTAATA
61701 AAAGCAAAAC TGTTCTAGCA TTCAGTGTTT ATTAATTTGC AATACACAAA
61751 CAATATCATG TTTTACTCAT GTTGGGTCCA CCACATATGT ATATATTTAA
61801 GAATAATGTG ATTGGTCAGT ACTGCAAAAT GTTTTCGTGT ACGGTGGCTG
61851 TGAGTACCAT ACTAATTAGT AACTAAGAA CTATGAATTG GAACAGGAAG
61901 AAAAGCAAGA AAATGAACAT TCAGCACTAT TTGGAATGA AACCTCACTA
61951 TGCAAGAATT CATTGCATTG ATGCCCTTCT AGGGGGAGTG TTTGATAAAT
62001 TAATATTTCA CTAACCTAAG AGCTTCTGCT GCTCAAATCC TCTACACACA
62051 CTAATGCAGT GTCAGTCTCT GAGTTTGGCA GTGGCACAGC CATAACTTTA
62101 TGGCAGTTAG GTGAAATCCC TTTTGTGTTT GTGGACATAG AACACAGAT
62151 GTGGAGTTGT ACTTCTCTGG GGCCAGCACA AACGCCATTA AGTCTGTGAG
62201 TCTCATTCTG TCAGTGCTGA GCATCCATGT GTTCTTTGAT TTGCGAGTGT
62251 GTGTTTGTGA TTGGCAGGTT TCTCTTACGT GACTCTGAAG GAGTGTGTCT
62301 GATCACATCA CACCCATCCT TAGGCCCTAT TGATCATCAG TGTACCTTCC
62351 CACTACTATA CTTTAAATAG ATGCCCTGTA TTTAAATTTG ATTTTGAGAT
62401 TAAACAGAAT GGCAGAGACA ATTTTGAGAC ACATCTTTCT TTCATGCTCT
62451 GGTAGGAAGA TACAGATTTT TAGGACAGTA GAACAGAGTA AAAGATGAGT
62501 GCTGTTGGGA TCCTATCTTT CTCCTAAGCT ATTTTCTCTC TCTCAGTTAT
62551 TCATCATCTA TCTCAATTTT TCCTAATGAA CTCCTCTATA TAAAAGAGGA
62601 TCCAGGTCCC ACATCCACTG TCAAGGAGGA ATGTAAGATT GACTTGCAAC
62651 TCAGCCTGTG TACGCAGTTT ATGGTTTTTC TTGGCAGGTT TAATGTTCTT
62701 TCTTATCTCT TAACTTCTTG CTATTCAATA GTAAGTAACT CCTGGCAGA
62751 ATTACCTGTG GCTAGAGAAT GCTGTTATCA GAGCATCTTT GTTTAATTGG
62801 TACTTAGAAC AGAAGGTGTC ACCTATTTGA CAGGCCAACA ATTATGAGCA
62851 AGGAGGCATT TGATTATCA AGATAGAAAT CTGCCCTGTA GGTGGAACA
62901 TGTCTATGTG GGTGATATG TTTTGAAT ATTAAGCCTT GTTTGTGCAT
62951 GACAACCTTA GGAAGGTGTA CTCCAAATGT CTCCAAAGGT TTGCTGTAGT
63001 TCTTTACAGA AGTTGGGCTG CTCCTGGTGG ACAGTGTGTA ACAGTGAACA
63051 ATGTATGCTC TAGACTGGGT TCCTTCTCTC CACCTGTGT CTGTGTGGCC
63101 TTGGGCAAGT TGTTTAAACA ACCACTTTTT GCCTCAGTTT CTTTATCGGA
63151 ACAAGGAGAA TAAGAATACT TCAATCAGGC CAGGCGTGGT GACTCACGCC
63201 TGTAATCCCA GCCTTTGGGA GGCCGAGGTG GGTGGATCAC CTGAGGTGAG
63251 GAGTTCCAGA CCAGCCTGGC CAACATGGTG AAACCCCATC TCTCCTTTAC
63301 TTATGCTGGC CTGATATTGA TCGTCCATGG TAGAATTGAT ACTGCTTGAC
63351 AAAGCAGCCT ATTTTCAGTA GGACCTTCT TCTCTAGTTT CCTCTGTAGC
63401 TATTACCTTA GCCTTCATT TCATTCTTCA CACTACAGAT ACTCTCATTG
63451 ATAAAGGAAT GATGTCTTTA TGCTTTCAAG CATTCTGGCA AGTTAGTAAT
63501 TCAACTATGA TTCTAGGTCA GACAAAACCA GTTATGAACA TAAGACTGTT
63551 TTTAATCTCC TCCCTGGTCC CCCAACCAACC CACCCCAATC AGGAGAACT
63601 ATGTTCTGCA TTGGTTAAG GAACCCGCTT CTTTCTTTGA TACCTGACCT
63651 ACAGATCCAA TCTATTCCCA GGAATTTTGA TAAGAATTCT CAAATCCTCA
63701 GCAAGGCTAT GCCACTGTCA TGACTCTCCT ATTCCTGGTA GTGTCAATTCT
63751 CAGTGTAGGC TGTTTGATAG GTAGTTTGT GAAGTCTTGT TCATCATAAT
63801 GGATCATATG ATTTTAAAA GCAGGACCTG GGTCAATGTC CCAGATTAAT
63851 TTCAACAAAG TTGGTATGTT TTCTTCTTAA AATTAATTTT TTATGATTAT
63901 CAAAGTTTAA TATGCATACA GTATAAAATA TCAGATTTCT ATAAGGCTTA
63951 TAATAAAGAG TAGCATTCCT CTGCCCTATT CCCCTCTCAT ACTGGGCAAC
64001 TTAATCCAAA ATCAACTGCT TTCAGCTCTT TTAGCATTTT CTTATGGTTA
64051 TCTTCATATT TCAAAAACAGC ATGCTTATAT GGTGTGATTT TGAAATTTTCA
64101 AACTTAGATT TTTATCTACA GACTTCCTTA TGGAAGATAA ATATTTAACT
64151 CTTTTGTGTC TACTCCTTTT CTCATCTCTT AATGTAGGCT ATGTTAAAT
64201 TTTTGGTTAA ATCAATTTAA AGCCAGTATA GTATAGTGGC TTAAGAGTGA
64251 GGGTGCTCAC TCAAAATTC AGCCTCACCA CCCATTACTT TGTGTGACTT
64301 TGAGCAAGCT TTAAAAACGTC AGTGTCTCAG TTTTGTCAAC TGAGTAGATA
64351 CCTCATAGAA TTGCTGTTGA TATTAAGTGA CTTAATCCTA TGGGCTGAAT
64401 TTGTCTCCCA AAGTTTCATT GTTGGAAACT TAATCCCAG TGCATGTGTT
64451 AAGAAGTGGG ACCTTTCAGA GTTGAATAGG CTATGAGGGC TCTGCCCTCA
64501 TGAATGGATT AATGCCGTTG TTGCAGTAGT GGGTTCTCTA TAAAAGGAAG
64551 TGTTTGACCC CCTTTCCTTG CCTCCTCATG CATGTGATGG CCTTAGGCAT

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FIGURE 3-19

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64601 GTTATAATGC AGTAGTAAAG CCTTACCAG ACACTGGCTC CTTGATCTTG
 64651 GACTTCTCAG CCTCCAGAAC TGTAAGAAAT AAAAGTTTTT TCTTTATAAA
 64701 TTACCCAGTC TCTGGTATTC TGTATGGA GCAAAAAACA GACTGAGACA
 64751 CTTAATATAT ATGAAGCATC TAGACTGTCT GGCACATTGT ACATTTTAAA
 64801 TCCCAGATAT CGATATCATC AATATCATCA TCATCATCAT CTGTGGCTGT
 64851 ATAATACCTC CCTCTGCATT TAAAGGATGA GGGCTGGTGT AGCAGTTATT
 64901 AATATAAGTG AGCTAGTTGG CTATAAACCT CTCCTATAGG CTTTGCCATA
 64951 AACTTGTGTC ATGGATAATC AGAGAATTTG GACCTCCTAA TGACAGGCCA
 65001 CTGACAAGAA AAGCCCAGAG GGAGCTGATT GAGCATGCTC AGTTCTTTCT
 65051 ACCAAAGGCC TCAATCAGAC AGATTCTCTT TCCCAGGAGT AGACACTGAG
 65101 GGGGTGGAAA CAGGCTCTGA GTTGACTCCA CTGAGAAGTC CCTGAATGGA
 65151 TAGCAGCCAG GGAATTAAGG AGTTTCCCTG TGGCAAGTCT CTA CTGCTAC
 65201 AATATTAGGA CAGCTGTTTT TTTAATTTGT TCTGTGGGTG CATATTTTGT
 65251 ATCTCCACAA CATACTACT TACTCACTGT GTTGCTTTTT GAAATTTATA
 65301 ACATCTAAAT TTGCAATGT GAGGTATGCT CTCAGGAAAA TTATATATCT
 65351 GTTAAATTC TTTGCTCCTT TTAGGACACT TCCATCCATC TGGTGACCTC
 65401 TAGTAGCGTA CATACTCAGC AACAATTTAA GGTAGTTTCT GGCTTGTITT
 65451 TCCCAAACAA TAATTTGTTC AAAATACAGA AATTTGGAAA GTACCCCATG
 65501 ATGAGAAACT TTTGAAAGAG AATTTAATGT ACAGTAACTA TTTTTTCT
 65551 CTGAGGAATA ATTTTGGGAA AAGAAATTTG CTTTATATTC AGGCATATTG
 65601 AGTAAAGTGC CTTTCATTTT AAACAAATTC ATCACCTCTC CTTTCCCAT
 65651 TCCCAAACCT TGTTCATTTT CTTTCATTTT AAACCTCTGA TCTGTCTTCC
 65701 CCTCACTTTA CCAGGTAGCT AAATCTCTTA AGAGCCAACC TATTGCCACT
 65751 CCTTCATCT TTTTAAATCT AATGGATCAT AAGTCTCTGT GATTTTCATC
 65801 CTCACATCTC TCAATCGGT CTCCTGGAT ATCTTGTAC TTTCTGATTG
 65851 AGACAATTGT CATTTGTAC TTTGTCAGC CTTCCAGCTG CCTTCTCTCC
 65901 AATCTCCCTC ATGAGCATTC TGTCTTCAA ACTGTTGCCA AAGAGGAATT
 65951 TCTAAAATAC CGTTTGATCA TGTAAATCCA GGTTTTAAAA ACCTAATGTT
 66001 GACTCTCTGA CATTTAAAGA ATAAAGTCCG TATTTCTTGG GATGACTGAC
 66051 ATGGCTTTTG TGTGATTCTG GCTACATCCT TAGAGAATCA CTTGCAGATA
 66101 TTAATTTTGC ATATGCTATT CCTTTACAT GGAATGTTCC TGCCTCTCT
 66151 TTCCCCCATC CTTTGCCTGA TGAAGGCTTA TTCATCTCTC ATGTCACITT
 66201 GGGTGTACC CTGAGGAAAC AGTGGTTATT TTTTCCCTGC CCATCTGGGC
 66251 TGGATACCCC TCCTAAGTTG TCCCAACAAC CACAGTACAC ACCTTGGTGG
 66301 ATTATCACAC TGTGTGTTGT TCTGCCGTTG TTTGTGTTCT TTGAATATGA
 66351 GTTTCTTGAG ATTAGGGACC TGAGATCCCC AGTGCCGAGC AGAGCAGGAC
 66401 CTGTTTCCAC CCCCTCAGTA ACTACTCCTG GGGAAAGAGAA CCTACAAATA
 66451 AATGTGTATT GCATGAATAA AGCTATATAT CCCCTCTCTG TTCATACTTA
 66501 TCCATTTAAT TTCTGAATCT TAAATGCTGT ATTTTCTCTC ATTAAATTTG
 66551 GTTTTATTGG TTTTCAGTTT CTCTTTATAT GGATTTTGAG TCCTAATTTT
 66601 GTCAACCAGC ATATCAACAG TTCTTTCTAG CTTTGTGCCC CCGGTAGAAT
 66651 GGCAGCTCCA TGAAGACAGG GATTAGTGTC TGTTTTGTTC ACTGCTGTTT
 66701 TCTCAGCATC TAGAATAGTG CTGGCACATA TAGATACTCA CAAAGTATTT
 66751 GTTGAATGAA TGAAGGTGTT GCATACAAAT TTGATAAATA AAACCTAGGT
 66801 TTTCTTTCAA ATATTAATCC TTAGCTCCAT TCTGTTCAAT ATTTTATTA
 66851 GAGATAACCT TTAATAATCT TCCTTGTCAC ATAAGAGTTA ATTCCATGAA
 66901 TCTTACAGAA CAAGGCTATA CTGAGAAATT CAAGGAACAC CTTAATGAAT
 66951 CAGGGTTATT TCATTGTGAG AGAGTATAGA AATGGTTGAT AGTATGCTGT
 67001 AAGTAATTTT ACTTTACGTG TAAGTACTTT TCTCTGGCTT TCCAGAACAT
 67051 GCTGTTGGAG TAAGAGAGGA ATGCCATTAT GTGGACCGAG GGGATAGATT
 67101 TGGATACAGC CTCTTTTGAG GAAGGTAGAG AGGTCAACTA TTACATATCC
 67151 AGCAGTAACT TCCTTTCAA AGACTAAGTG TTCTCATTCA ATCATTTGAT
 67201 ACTTTTTGTG CATCTACTAC AATTTGAAGA ATAGAAGAGG GAAATGCATG
 67251 TGTAAGGCAT GGTGGCAACA TTTAAGAAAC CCAGATTTGG GGATACAAGG
 67301 TGTGTGTGTG CACATGCATG TGTGTGCAAT TTAATGTCAC AGGGTAAAGA
 67351 ACTTTGAGTC AGTGACAATG AGTGGCAATG GTGGTAATTA AGTGCTGGGG
 67401 AAGATCAAGG GAGAGAGAGG GTGCTGAGAG CCAATAGGGT GGAACATGTT
 67451 TGAAAGAGCT GGGTTCTGAA GTATTCTCTC ATAGAAGGGC ATTTTAAATA
 67501 GCTTTTTTGC GTCTTATTC TGTAAAGCAT TATTAAATTG TTCTCCCATC
 67551 TTTAAAAGGT TCCCTAGCTT AGGTGCACTG GCAAGAAATT ATAAAAGCAG
 67601 CATGACCAGG CGTGGTGGCT CATGCTGTGA ATCGCAGCAC TTTGGGAGGC
 67651 CAAGGCGGGA GGATTTCTTG AGTTCAGGAG TTTGAGACCA GCCTGGGCAA
 67701 CATGGTGAAA CCCTGCCTCT ACAAAAAATA CAAAAATTAG CTGGGAGCAG
 67751 TGGCACGTGC CTCTAGCCCC AGCTACTCAG GAGGCTAAGG TGGGAGGTTG
 67801 GCTTGAGCCT GGGAGGTGGA GGTGTCAGTA AACTGAGATT GTGCCACTAC
 67851 ACACAGCCTG GGCAACAGAG CGAGACCCCTG TCTCAAAAAA AAAAAATTAA
 67901 ATTAATAACAA TAAAGCAGT GTGGTTGCTT ATAAGGAGTG ATGGAGTGGA
 67951 CAGAGGAGGT TTTTGGGCTA GTCAGGTAAG GCTGGGGTAT GAATCTAGAA

FIGURE 3-20

68001 GTTTCATTT AAATAGCAGG GAGCCCTTAG GCAATCACT TAACTTCTGA
68051 GCTTTGCCTG TTTCACCTGA GGTTCCTTCA AAGATTGAAT GAAACCGTAT
68101 ATATAAAGTG CTCTAAACA TCATCTGCCA TGTGGCAGGT TCTCAAGAAA
68151 TGTTAGTTTC CCTTCTCCT TACAAAGATA AGATGCTTGC TTTGAGTATA
68201 TTTTATAGGCT TCCTGATCAT TATTGGTTAT GATTTTAAAT CTGTGTCAG
68251 CCACCACCCA TATGGTTTCT GCAGTTAACA AAAGAGGCAA AGGTTCACTA
68301 CTGGGGGAAA AGAGGTGTAC AGAAATGGGT GTAGAGAAAG TAGATGTTTG
68351 AAGGGGATCT AATTAGGAAA GTATTTTTC TGGTGGTCCA GAATTTAAAA
68401 TTATAGAGTC TTATGAGAAA ATGATAATAT TCAGGTTAAG AACAGTTTAT
68451 TATTTCTCT CTATATTGGA GAATATTTTC ATTATCTTAT ATAAGAACCT
68501 TGTAAAAATT TTTCTCTTA ACTAGCTTCC CACTATAGGC CATTAATCCT
68551 GTTATTATTT CAAAGATTAA ACAACTATAG TAATAACAGG ATTATATGTG
68601 CATTAATTTA TATTACTTCA TTCCGCAAAG GATTTGAGGT AGTTTTTAGA
68651 AGCATAAAAAC ACTGCACAAA TAAAATAGTA GGATAGGAGT AGAAAAATAA
68701 ATTTTCAGCAA CCATGAAAAA TATGACATAG TATATGTTGT TAAGACTGGG
68751 GGAATGTAAA CACATCACCA GTCAGGGCCT ATATAGTTGT TACAGTCCCA
68801 TAGCAAATTT GACTCTAAGC TTCTGGCAAA CAACATGAAA AGGGAAGCAT
68851 GATGGATGTG GTTAAATAAG ACACAATTTA CTGTGTACTT TACTCAAGGA
68901 AGCAAGTATT TTTTGCCCT TTGTTCTTA TAGGAGATGC TGGTAAATGA
68951 AGTAATGTTG GCATTTGCC CTAGTGGGAG TATAGTGGAG GTAATAATGG ATTTTATCAG
69001 GCAGTTTCTT TAAGCATCTC TTGATGAAAG ATGAGGCTAT GACATCAAGA
69051 GACAATTCTG AGGCCGGGAG CAGTGGCTCA CACCTATAAT CCCAGCACTT
69101 TGGGAAGCTG AGGCCGGCAG ATCACTTGAG GTCAGGAGTT CGAGACCAGC
69151 CTGGCCAAAC TGGAACCTC GTCTCTACTG AAAATACAAA AATCAGAAAC
69201 OCTGTCTTTA CTAATAATAC AAAAATTAGC TGGGCGTGGT GGCAGTGCTT
69251 GCAATCTCAG CTACTTGGGA GGCTGAGGCA GGAGAATTGC TTGAACCCAG
69301 TAGGTGGAGG TTGCAGTGAA CTGAAATCAC ACCACTGCAC TCCAGCTTGG
69351 GTGACAGAAC AAGACTCCAT CTCAAAAAAA AAAAAAAAAA AAAAAAGCAA
69401 TTCTGAAAGT GGTGAGTGT TCTACCAGGG GCCAGGATGA TCTCATCTGG
69451 GTTATGGATT CTAGGTCTGG CCTCATCTAA GGTGACACAC AGAGGGTACA
69501 CCGCACAATC TTCTATCTT CTTTAAATAT CACTGCTTTC AACAGGACTT
69551 TTTTTTTTTT TTTTGAAC AGGATCTTGC CCTGCCCTGT CACCCAGGTT
69601 GGAGGGCAGT GGCATGATCA TGGCTCACTG CAGCCTTGAC CTCCAGCTC
69651 AGCCTTCTGA GTAGCTGGGA CAACAGGTGC ATGCCACCGT GACTGGCTAA
69701 TTTTAAAAAG TTGTTTGGT TTTTTTTTC TGTAGAGACA GGGTCTCCCT
69751 AGATTGTCCA GGCTGGTCTC AAACCTCTGG CCTCAAGCAG CTCTCCAGTC
69801 TTTGCCCTCT AAAGTGTGG GATTACAGAC GTGAGCCACC ACGCCTGGCC
69851 CAAAAAACAT AATAATGTGG TTATTGGAAG AAGTGATTTC CTCTCAAAAC
69901 ATAAATTCAT TCTTCTTTT ACTCTGTAA CTTTCTGAGG TGAAAAGTAG
69951 GAAGTTCCCA GATTTTTCAT TGCTGTAAAG AAAGATTATA GACAAGCAAG
70001 GAAGGAGTTA GAATAACCTG TGTGATAATG AATTAGAAGA GTTGGAGGTG
70051 TATGTAAGTA TGCTCAGCAT GAATTTATGT TTAGCTTAAT GTAGATACAG
70101 ATGGTTACAT GTGGAAGTA TTTATAGCTA TGCATAGATA GGTGTTGATA
70151 TGTACATGTA TTTTCTACCT CCTTTGGCTA AGAGGGCGCA GAAGCCATGA
70201 CATCCCTGTT GCAACAAAAA CACCTAGCAC CATTTATCTT GGTTTGTAAT
70251 ACTATCTTCC AGTAAAAACA ACCAGGGCTC CTGTGAGAAA GGGCTGATGA
70301 TAATATATAA GATTAGCTTG GAGCATCTTA TATATCAGAA AGCAAGGGAG
70351 TACTCAAAAA CTAAAAACAA TAACTGCTC CCAATAATG GGAGTATGTC
70401 AAAGGGTCAC AGGAGCCATG TGAAGAGATT TGCAATAGCC AACAAAAATGA
70451 AGAAGTATTT GAATTTAAAT CAGAGTATAA AATAAATATC TACGAGTCCA
70501 TAATGATATA AACAAGTGAT TGAATAAATA AATAAATGTG GGAGACTAGA
70551 CAAATCCCCC ATGCAGAAGA ATTCCAAGTA ATTTATGTAG GTAAATACTT
70601 CACTGTCAAA GAGGCAGAGC ATAATTAAAT CCCCCTCTCT GTAAGTGTGG
70651 GCTGCTTAGT GACTTCTTTC CAGGAGTGCA GTATAAATAG GGAAAAGAAG
70701 ACAACTTCAC AGTGGAGGAA TCTGGCAAAC TCTGTCCAC CCAGATGATC
70751 AAGGTTTACA TCAAAAGCAC TAAGCCATGT TGATACTGCA CTGTGTTTCC
70801 TTGATATAAT GGGATGAAAT GGCACCTTGT GTAGTCGTGC TTCCAAAAAA
70851 CCTCATAGCC CTAGACTAAT CATGGGAAGA ACACCAGACA AATCCTAATT
70901 GAGGGACATG CTACTTAATT CCTGAAAAGT ACTCCTCAAT GCTGTCAAGG
70951 TCATCTGAAA CAAGAAAAGT CTGGCAAAC GTACAGTCA AGAGGAGACT
71001 AAGGAGATAT GACGACTAAA TATAATGTGG TATCTTGTAT GGGATCTTGG
71051 AATAGAAAAA GGAATATTAGT TAAAACCTGAG GAAATCTGAG TAAAAATAG
71101 ATGTTTGTGA CTAATAATGT ATCAATAGTA GTTCATTAAT TGTGACAAAT
71151 GTAACATACT ATCGTAAGAT GTTAATAATA GAGGAACTG GATGTGAGGT
71201 ATATGGGCAC TCCTGTACT GTTCACAATT GTTATGTAAA TCTGAACTA
71251 TTCTAAAAAT AAGTGTATT TTATTTTATT TTATTTTGAG ACGGAGTCTT
71301 GTTCTGTTGC CCAGGCTGTA GTGCAGTGGT GAAATCTCGG CTCAGTCAA
71351 CCTCCACCTC CTGCTCTCAA GCGATTCTCC TGCCCTAGCC TCCTAAGTAG

FIGURE 3-21


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71401 CTGGGATTAC AGGCACGCGC CACCACACCC AGCTAATTTT TATATTTTAA
71451 GTAGAGATGG GGTTCACCA TGTTGGCCAA GCTGGTCTTG AACTCCTGAC
71501 CTCAGGTGAT CCACCTGCTT CGGCTCTCCA AAGTGCTGAG ATTACAGGCG
71551 TGAGCCACCG CGCCAGACA AAAGTTTATT TTTTAAAGG TAGGAAAGTT
71601 TCACATTTTG ATCGTACTAT TGAGATAAAA CTGGTGTGTT GTTGTGTGTT
71651 TTGAGATGGA GTCTTGACT GTACCTGGA CTGGAGTGCA ATGGCATGAT
71701 CTTGGCTCAC TGCTACCTCC ACTTCCCGGG TTCAAGCGAT TCTCCTGCT
71751 CAGCCTCTG AGTAGCTGGG ACTACAGGCA CCTGCCACTA CGCCAGCTA
71801 ATTTTTTGTA TTTTAGTAG AGATGGGTTT CATTATGTTG GCCAGACTGG
71851 TCTCTAACTC CTGACCTCGT GATCCGCTA CCTTGGCTC CCGAAGTGCT
71901 GGGATTACAG GCATGAGCCA CCGTGCTGG CCAAAGTTGG TGTTCATC
71951 TGAGAATGAG GTTCCAAGA ATTGAAGATA CAAGTTAGCT AAATAGTATC
72001 AGTGAACCA CAGAGTATAA CTTCAGACCA CTTGTGTTT TAAGGCAGAT
72051 CTATGCCACA GAGAAGTATT TGAATTTAAA TCAAAGTATA AAATAAATAT
72101 CTATGAGTCC ATAATGATAT AAACAAGTGA TTGAATAAAT ACATAAATGT
72151 GGGAGACTAG ACAAATCTCC CATGCAGAAG AATTCCAAAT AGTTTATGTA
72201 GGTAAATATT TCAGAGTATC AGTACTATGA TCCTTCTTAC AATGCTATAT
72251 CCGACTAAAA AAAAAAAAAA GAAAAAAGA AAAAGAACTG TGATCCTAGT
72301 TGGCAATGTT GACTTATAGC CAGAAAAGAT GACTTCTTA TTTGAAAGCA
72351 TCATGAAATG CTATCAGCAT GCAGAAATGA GAGGGCATAA CAGAGAGCTA
72401 TTCTATGTA TTTTATTFTA ATGTTTTAAA AGAGCTATTA ATAATATAAT
72451 GTGAAGAGAA GTTTAATTT CAGAGGAATG GGATGTTGG TTTTAAGATT
72501 ATTTTTCGAA AATGTAGTCT GTCATTTTAA AAGTGAAGTT TATAATGAAA
72551 AGAGTTTGAA ATTATTTCCC TATTATTAAT ATTTATTTAT TTTTATTACT
72601 TTTCTGCCAT GACAATTACA GTGCACATTT TCCCTATTTT TAGCTTTTCT
72651 CTGGTAAAGT GATTTTACCT CCTGTAGATC GTCAGTCCCC AGACTTCTG
72701 GCACTAGGGA CTGGTTTCAT GGAGGACAAT TTTTTCGAAA ATTGGAGGGG
72751 GAATGATTTT AGGATAAAAC TGTTCTATCT CAGATCATCA GGCATTAGAT
72801 TCTTACAAGG AATGTGCAAC CTAGATCCCC TGCATGCACA GTTCACAATA
72851 GGGTTTGTGC TCCTATGAGA ATCTAATGCT GTGCTGATCC GACAGGAGGT
72901 GGAGCTCAGG TGGTAATGCT CGCTCACCTA CCACCTCACT CCTGCTGTGT
72951 GGCTGTGTTT CTAACAGGCT GGGGGGCTGG GGACCCCTGC TGTAAATAAC
73001 CTTTCGAAGA TCTGAAAATT AACTTTAGTA TTTTTCGTA TTTACTCGAT
73051 ATTTTAAACA AACAAAAATC TAGAGAATGA CATAACAAAT GTATTTCTG
73101 CGTATCCACT ACTCTTTACT CAGATCCTAA CATTCTCAGT TTTGAAAAGA
73151 TGTAGGCTGG TCACAGTGGC TCATGCTGT AATGTCAACA CTTTAGGAGG
73201 CCAAGGAGGA CAGATCACGT GAATCCAGGA GTTAGAGACC AGCCTGAGCT
73251 ATAAGGCAAA ACCCTGTCTC TACAAAAATT AGCCAGGTGT GGTGGCCTGC
73301 ACCTGTAGTT CTAGCTACTC GGGAGCCTGA GGTGGGAGGG TCAATTGACC
73351 AGAGGCTATA GTGAGCTGTG ATCCTGCCAC TACACTCCAG TCTAGGTGCG
73401 AAAGCAAGAC CCTGACTCAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
73451 ATGTAACAT TACAGGCCCA GCTGTGTTCC CGTGTACACT TCTCCATTCC
73501 TAATCCCTTT CATGCACACT TTCCACAGG TAATCACTAT CCCACATTTG
73551 CTTTAATTAT TCCCATCATG TTTTATGCTA TGACTACAAA TGTGTGAATC
73601 TATATTCAC TGTATGTTAA TACCAACATT TTTTCATTTA TTTTACCGCT
73651 GATGGGCAAT TTAGGTTATT TCCAGATTTT TACTATTACA GATGCTTCTG
73701 TGAACATCCT TACTCATTTT TCCTTGTGCA CATGTGCAAA ATTTCTCTGG
73751 AGTACATACC TGGGAGTGGG ATTAAGTAGA TGTGGTGCAT GTACATGTTG
73801 TTGTATTTAT CAGTAGTTCA CTCTTATTTA TTGCTGTGTA TTCCATTACA
73851 TAGATATACC ATAATTTGTT TATCTAATCA CTTATTTATA GACATTTGGG
73901 TTCTTTCTGT TTTTGTGACT ATTAGAAATA AAGCAGCTAT AAACATTTGT
73951 ATATAAGTTT TTGTATAGGC ATATGCTTTG GTTCTCTTGA GGCTCAGGGG
74001 CTGGGAACCC CCTAGGAATG GAGGAATAGC TGGGTCAAT GGTAGGTTTA
74051 TGTTTAACTT TTTAAGAAAT TCCTGAAGTG CTTTCAAAG TGTTTGACT
74101 ATTTTATATT CCAAGTAGCA GTATGTGAAA GTTCTGTGTT CTCTACATCC
74151 TCACCAACAC TTGGTATGAT TAGTCATTTT TAGATATCCT GTGATGTGTG
74201 TGGTFTTTTC TTGTTTTAAT TGACAGTTCC CTGATGACTA ATGATATTGG
74251 GTGTCATAGG CATATTTTCC ATTTATATAT CTTTTCGTA AAGTTCAAAT
74301 TTTTTCGCCA TTTTAAAAT TGAGTTGCTT GGTTTTATT GAGTTCTGAG
74351 AATTTTGTAT GTAATTTATA TACAAGTTCT TACTAGATAT GTAATTTGCA
74401 AATCTTCTCT CTCAGTTTGT GGCTTGTCTT TTTATTTCT TAGCAGTGTG
74451 TTTCAAAGAG AAGTTCTTAG TTTTGATGAA GTTATGTTTA TCAACATTTT
74501 CTTGTAAGTA TTTCTGTAT GGGCATTTAG GTTTTCATG TTATATCTAA
74551 GAAATCTTTG CCTAAACCAA GATCACAAAG ATTTTCTCG GTATTTCTT
74601 CTTTGTGTTG AGACAGAGTC TCACTCTGTT GCCCAGGCTG GAGTGCAGTA
74651 GTGCAGTCTC AGCTCACTGC AACCTCCACC TCCTGGGTTT AAGGATTCT
74701 TGTGCTTCAG CCTCTGAAT AGCTGGTATT ACAGGCATGT GCCACCATGC
74751 TCAGCTAATT TTTGATTTT TTTAAGTAGA GACAGGGTTT CACCATGTTG

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FIGURE 3-22

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74801 GGAAGGCTGG TCTTCAATTC CTAACCTCAG GTGATCTGCC CAACTCAGCC
74851 TCCCAAAGTG CTGGTGACAC AGGATTTTGC TCAGCTACTT TGCCAAACCAG
74901 GGACTCACTC GGCCATGGGC CAAGGCACCC CGCTCACTTG GTCCACCTGT
74951 GCTATAGCTT CTA CTGACGT TCAGCGGTTT CCGAGCTCTT GTCATGCATC
75001 TAAAAAGAAG GAGGATATGC TGACAATTTG AAGTGTAAAG ATGGGTGGAG
75051 AAGAATTTTA CTGAGTTATG GAACAACCTC CAGCATTAAAG GGGACACGGG
75101 GTGCTCCCTC ACCCCACAG TCAGGTGGTT TTTCTCTCTC TCTCTCTGTG
75151 TCTGGGTCGT GGGCTTTTFA TGGACTCAGA ATGGGGAGTG TGTACAGATT
75201 GGTTTGTGAG TATGCAATAA AAGTTAAAGT GAAGACAATA TTCAAAGGTG
75251 GGCGCGATAG TGTAGAAAAC CAATTAGGAA AGGGTAGGTA TGTAGCCTGG
75301 CATGGTGGCT CGTGCCCTGA ATCCCAGCAC TTTGGGATGC CAAGGCAGGT
75351 GGATCACCTG AGATCAGGAG TTTGAAACAA GCCTGACCAA CATGGTGAAA
75401 CCGCTCTCTC ACTAAAAATA CAAAAATTAG CAGGGTGTGG TGGCACACAC
75451 CTGTAGTCCC AACTACTTGG TAGACTGAGG CAGAAGAATT GCTGGAACCT
75501 GGGAGGCAGA GGTTCAGTGT AGCCAAGATT GCACCATGGC ACTTCTGCCT
75551 GGCTGACATA GCGAGACAGT GTCTCAAAAA AAAAAAAAAA AAAAAAAAAA
75601 AGAAAGGGTA GGTATGTGTA AAATAGGTGG AGGGTGGGGA TCAATCAGAG
75651 GAAAGCATGC CAAATGGGAA GACAGGTTCT CAATCCAGTC CATGGATTTG
75701 CCTGGGACTT GTAGCTAGGC TTTAAAGTGT CTTCAGCTTG AAGGTCAGGT
75751 TTCACCAGGG ACCCGTTCTT ACACCCCTAT CTGCCTAGGC ATTTGTCTGC
75801 CTCTTGCTGC TATCAGTTCT CCCCTCTGAA GAGGTACATC TAAC TGCCAT
75851 TAGAATAGGG ATGATGACTG ATACTAATCG CTTCCTGCTG ACAGGGGTGC
75901 GGGGTGCTGT TTTGGGAAAA TGGCAGTCAG ATCTCCCTCA GAGGCCTATC
75951 TAAGGGTCCC CAGTAAAGGG GAGCCATCGT CTGAGGCTCC AGTTTCATGA
76001 CTGGAGTTTA ATGGCCTGAA AATGAGAAGA CAACCAGATT ATTAGAAGGC
76051 ATGTATCAAA ACAAAATAAG GGGTAAGGA CAGCTCAAAA ATCCTGAGGC
76101 TGCCAACATG CCCAGATAAC AGGTGGCTAT AGTTATGCCT GCTAAGATTT
76151 GGGTGAATGA GGCTCGGCTT TGGTCAGCTT CTTTGGTCTT ATTTTCCCAA
76201 ACAAGAAAC CTCTGGGTTA CGGGCACCCCT GTTTACTCCT ATCACCCTGC
76251 AGGATTTGCA GGATAATTGC CCAGAAGTAG AATATTGATC CAGATTTTFA
76301 CATCACCCAT CCTTTTGT TCTTCTGAGC TGCAGCTGAT GATCACTGGT
76351 TGGTTCACAG AAATAAGCAG GGTTAGTCTA AAATGCAGAC AAAA ACTTAA
76401 AAACAACATA TGAGACTAGA ATTTAATGAA AAGTGTATGA TAAATTTTGA
76451 AACATAATTT TTCTCTCTCC AGTCTCATTT TTTGTTAAAA ACAATCATG
76501 ATAGGACTGA GTCATTTTGA GAATAAAGTT TAGTCTTATA TTTGGCCTGG
76551 TTATTTGCAT AAAGCACAGC AAGAATAATT ATTTTTCACA CAGGCTTTTA
76601 AAATTGGCTT TGATGGAAGT CTGTTCCACA AGGAATTTCA GATAAGACCT
76651 TTTAAAGCTG AGCCCGACCA TGGGTTTGTA TCCTCAAATA CCTATGAGTT
76701 GGGTAAATTC CTCTCTCTT GAGGTCCCAA GATAACATGG GGTTCCTGGG
76751 CCTATTAGAA AGTGACATT TTTATTCACC ACAGATTAGG AACTCTGTAC
76801 AGGGACTGTG TAGAAGACAA AGTATGAGGC CAGTTTTCCT AAGGGGCTTT
76851 TATTGGTTCT GCAAGTCAAA CTTGATTTCT TAAAGGTAA GACACCCCTC
76901 CAGTCAAGC CTGGGTAAAA CAACCAGTTT CTCCAGTTGT GTCTGTGTC
76951 AAAAGAAAAAT GGATTCCTTAC TGCACTGATG CAAATAACTG TATTGCTGCA
77001 AATTAAAGAT ACTCACAAAT AGTTTCCAAG TTCTGAGGAA ACCAGGCAAA
77051 AAGAAATAAA TGTGCTCCAA ATTTTGTTC CTGGAGTATA CCTACTCAA
77101 TTGTTAAAG CTATAGATAG CTCACATGA AAGTTTCCTT GACTCTGAAA
77151 AACAAAACAA GGATCAGCAA TGTTTTAAGC AAAAAAGAT TACTTCAGCT
77201 TTCTATTAGT TCAGTACATT CTATTAACCT TTCTCTGCT TGATATTCAT
77251 GAACATTTCA GCTCTTCATG AGTCTGTAC ATTTTCCCTC TATTCCAATG
77301 TCACAATCTC CAAAGTTATC AGAAACCTGC ATTTGAGAGC ACCTGTCAAA
77351 GTCCCATAGC TGATTATAAA CCATCTTTTG AAAAGGATCA AAATAAGACA
77401 ATTGTCTGTG AATGACAAAA TGTCTTTGGG TAATAACAGT CAAAGCCATG
77451 ATTGACAAG AAATTTGGTT ATTTCTGAGC TTTACAATAA CAACATAATA
77501 ATTTTTTTTT TTTTTTTTTT TTTTGAGACG GAGTCTCGCT CTGTGCCCCA
77551 GGCTGGAGTG CAGTGGCGGG ATCTCGGCTC ACTGCAAGCT CCGCTCCCG
77601 GGTTACACAC ATTCTCCTGC CTCAGCCTCC CAAGTAGCTG GGA CTACAGG
77651 CGCCCGCCAC TACTCCCGGC TAATTTTITG TATTTTITAGT AGAGACGGGG
77701 TTTACCGTT TTAGCGGGGA TGGTCTCGAT CTCCTGACCT CGTGATCCGC
77751 CCGCCTCGGC CTCOCAAAGT GCTGGGATTA CAGGCGTGAG CCACCGCGCC
77801 CGGCAACATA ATAATTTTAA TTACGATTGA TAGCATATAC TCAGACATTA
77851 GAATTTTAGA AACCTCATAG AATTTTGAA CATATGTATT TTTCATTAAA
77901 ATATAACCTG AAGAAGATTA AACATTATTT TTATTTTGCC AATCCACAT
77951 AACTAAACAT GTCAGTTAAT CCTGTTTACC TCTCTTTTGG ATGCTCCAGG
78001 AGCCCTCTGT AGTATTCAAA AGTAAGGGGT CAGAAAAGAC AACCTTGAAA
78051 CTGAAGTTTG ATTTTGGGAA GCCTGTTAAG TACATTAGAG GTTTAAAACA
78101 CTTTATATTA TGAAATACAA TTCCAGATTA CCATAAGTCA TTTATTTAGC
78151 CAAAATGATG ACTCAAAAAT TTTTAAAAAG GTAAAAACCT TTACTCATTA

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FIGURE 3-23

78201 AGAGTGAAGA CAGCTTTTCCA AACAAACAAT CCATCTCTGG TCTCTCCAC
78251 ACCCTTTTATT TTTTGATGAA ATCTTTAGAT AATTCTGTCC AATCTTAACC
78301 AGTTTGACCA TGAGGTGAGA TTCTTATAAA CCTTTACAAA TTTTGTGTA
78351 AGAGTAGATC AGTGCCTTAA GAAAACCTTG TTCTTTTATT CTAATGTTCA
78401 ATTTACAGAA AAACCATGTA ATACCCTTTT GAATTTAGTC AATATGTTCA
78451 CACACAGAAT TTCTTTTGCA AGATTAATTT TTACAAACCT TCCACAACCT
78501 TCAACTTTAT CTTATCCAAC TTAACAACAT TATTTAATCC TCTAACTAG
78551 GCAAAAATTT AAATTCOCAT GCCTTCTTAT AATCCTTTAC TAAAAACACA
78601 TTTACTTTCC TTACACACCT TGATGTAAT CTGTTTTCAG TAGTCTCAAT
78651 TACATGGTAT AATGTAAC CTTAGCAATT TTTAATTTTA ATGTAAGGCC
78701 TGGTAAGTTA TTTTAATTAT GTGCTACCAA TTATACTTA AGTTGTAGCG
78751 ACTCTGGTGT GCTATTGGTA ATATGGCCTT ACAAACCTGA AAAGCAAGCA
78801 AGGTGAACAA TTTTCAAAAG CCCAAGAAGC AGGCTGGGTG TGGTGGCTCA
78851 CACCTGTAAT CCCAGCACTT TGGGAGACCC AGCCAGGTGG ATCAOCTGAG
78901 GTCAGGAGTT CAAGACCAGC CTGGCTAACA TGGTGAATTT CCGTCTCTAC
78951 TAAAAAATAA TAAAAAAT TAGTTGGTCA TTATGGTGT TGCCTGTAGT
79001 CCCAGCTACT CAGGAGGGTG AGGCAGGAGA ATCATTGAA CCTGGGAGGC
79051 AGAGGCAACC AAGATCATGC CACTGCACTC CATCCTGGAC AACAGAGTGA
79101 TACTGTTGAA AAAACAAAA AGAGAAAAA GCCAAGAAG CAGTTTATAA
79151 CTTTAAAGCA TTAGTAAAC CTAGTATCTG ACCTGCATAA TTTAGACCAC
79201 ATGTTTACAT TTTGAAGACA TTTGATTTT ACCAATAATC TCTAAACTT
79251 TTTATTTTTC AAATATTTAA ATCATTTGAA CTAAAAGGTA TTATAGCTTT
79301 TATTTTCTCT TCAGAAATA TTTGATCTAA GTGCTTATTT TTCTCTAAGC
79351 CAATTAAATTA TTAGCTTTT TTATACAAAC ATCACACATA TTGCACATAT
79401 ATAACACAC AGACAGAGGA TCCAGTAGTT GTAAGATTTT TCATTGTCCA
79451 ATCTCCTAAT TAGATTACTG ACCTCAGGAT GGAGCCTTC AAGAGCAGGG
79501 CTAGGAAAGC ATGCAGTTTC TAGGGCCTAA TAAATAGTTA TAGCTGGAAG
79551 ACAAACACAG ATTTTGAGAG GGATTTATCT GCTTTTAATT CTTTGGGTTT
79601 CATGAGGAAA ACAGAGGTTT TTTTCTAAAA TGGGGTCAGT GTGCTCTCT
79651 CCATTTTTC CAGGGAGTCC CAGGCCATCA GAAGTTATCT TAGGGCTCT
79701 CATGCGTGCA TTAAGAGAGG CAAGACAAAA TGGAGAAAAG TAATTCAGTT
79751 GACTGAAAAA GAAATCTTT TTCCAGTGAA ACAAGATGCA AGAAGAGGAA
79801 AACATAGAGG CCTTTTAAAT ATGCTATAG CTGGATATC CACTTTTAAAT
79851 TAAGCTGACT TTTTACCATA GTGCTCTTAT TTTAAAAAAT CCTTTTAAAT
79901 CCTTGTTAC CCAACTTTAG CCTCACCAAG TGGCCATAT TTCTGGCTTT
79951 TGAACCTTAC CAAAAGTAAC CTCACAGGTG AAACCAACAA GCCTTAAGTA
80001 AGGTTGTGAC TTCACTGCCT GTGTACAAGG TATTTTCAA GAGATGGTAA
80051 GCAGTTTTTT CAAAATCTAG AATCTTTTAA GATAGCTCAG AGAAAGGAAG
80101 ATTTAAGAAA GGAAGCTAGA AGTTGTTTAT GGAGGGGAAG AGAATCAGCA
80151 AATGATAAAA GTCACACAGA TATTAGCCAG AAAGTACTCA TTCCCTAAGC
80201 CAGGATTGAA CCTGGGCTTC CATTTGAAAA TGGCAGAGAC CAAAAGAAAG
80251 TCCTTCCACG TGGTTACAAG GTCAAGCTCC CAAGGACATA AAACAAGATG
80301 GAGACCTTAT TCAGTTTTTT TTCTTTCAGA GACCTGTAGC AAAGTCTGTA
80351 ACTGACCAGT TTGCATGGCT GGCTTGAACA GTGGCTTAT GGGGTCTAG
80401 GTCTGTGTTT TATCTGTCT TACTCTTAT GACAGAACTG TACAGAAAGA
80451 CACACAAAGC ATAGCAGATT GGCTACAGCT TAAGATTAGC CTCACAAATC
80501 CTTTTTTCCA TTAATCAAAA CTTTACAGAA GAATAACAG TGATTTTAT
80551 CCTTCCCTTT ACTGGTTTGC ACAGGGAGAA AGAGGCCAGA AGTCTGACTG
80601 GTAAGAACTT TTAATCTTTT ACTGGCATGT CAGGCTTCTG GGTTCCTTC
80651 CCAGTTCAAT TTTAAGCCAA GCAGTTTAAAG GTTTGGGGAT ACTAACTTT
80701 TCACAGATAT TTTCCAGTAT GTTTAAATAG TTTTGTGTTAG CCCAGATTTA
80751 ATAATAGTTA TCTGTAGTAG GGTGTGATG ACCACTTTAT TCCAATGCCA
80801 CAAACAGAAG TTGATTAGCA AATTATATAT ATATTTGAT ACCTTTTATT
80851 TACATAATTT AAGGCTATTA GACCAATATT GGTATTACA GAGCATAGAT
80901 ACCTTGAAAG AGGCCAAGAT GGAGTGGAAA TGCAGGTTGG AGCTACCAAA
80951 GGGCAAAAAA CTATTCATCA ACCTTTAACT ACAATAAATC TTCCCTTTGG
81001 GTATTTTCAT TTGTAAACAC TTTGCCCTTG CAGTCATTTA CATCGGCATA
81051 ATTACAACAC CTTTGCTTTA TTTGGCATGC AGGAGAATCT TCTTAAATAT
81101 TAAACCTAAC CACTTTGAGT GATTTGCATC CTGCTTTTGT CATACATTTA
81151 GAGCCTTGGG ATTTTCTCTC AGAATGGAGT AGGAAACAAA TAGGGTCTGG
81201 ATAGGGAAT TGAAAAGCTT CCTGGTATTT TTCTGTGAA AGATTTCTTA
81251 ACATGGCTTC TTGGATGTGT CTCTCTGATG TCAAACATAC ACACATATTC
81301 AAATAAGAGT TATACAAGCA CATCTTGCAC ATTTTGGCA TCTATGTCTC
81351 AAGACACAG ACATTCTATC TGGTGTCTG ATCGAACCAC TTTTGCATGT
81401 TACTAGACTG AAAATTATTG GAAGGTAGAG AAATCTCTTA TTTGTTTTTA
81451 TATTCCCAAC AGCCTAGGAT AGAGCCTAGA ACATTAAAGA AACTAAAAAT
81501 TTTAATAGTG TAACTGAAAA GCAGGTTAGT TGGTCACTGC ATGTAGAGTC
81551 CAATTAACAA GAGCAAGTTC TGATACAAAG AAGTGTATTT ATTTCAAAAC

FIGURE 3-24

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81601 TAGCTTAGGG GAAGAGGCAC AAAGCATCCT GCCTTTAAAT GTGCCACTTC
81651 ACCTTTGGAG CAAAAAGTGG GCATTTTTAT AAGGTAGGGG AGGAAATGAG
81701 CAAGGGCAAG TGTCCTCTG CTA CTGGGCA AGTATCTGAG CTGGCACCTT
81751 CTTGGGCAGA AGTAAGTTGT AAAAGTGGCC AAGTGGGTAT GCTTTCAACA
81801 TGCCCTCCTA GTGGGCATGA GTTCTGAGAT GACCCTGTGG AGAGTCTGT
81851 GGGGGCATGC TTTGGTCTGC AAATAGACTG TTAACCTTCG AGGAGAGATC
81901 CTTGGGGGGA AAATATATAT TAGGAAGTCC TCTGTGGGTG TTTGTAGAA
81951 GGACCTAGAG GGACTAGGGC TCGATTGTTA TTTATTTATT TATTTATTTA
82001 TTGTGTGTGT GTGTATGTGA GAGAGAGAGA GAGAAAGAGA GAGAGACGAG
82051 GTCTTGCTCC GTTGCCAGG CGGGAGTGCA GTGGCATGAT CATAGCTTAC
82101 TGCAGCCTCA AACTCTGGG CTCAGGGAG CCTCCTGCCT CAGCCTGCCA
82151 AGAAGCTGGG GGTACTGTTG TGTGCTACCA TGCCAGCTA GTTTTAAAG
82201 TATTTTTTTT TGTACAGATG GGTCTTGCT TTGTTGCCA GGCTGGGCTT
82251 GAACCTACTG CTCAAGTAA TCCTCCTACC TCAGCCTCCC AAAGTGCTGG
82301 GATTATACAT ATGAGCCTCT GTTCTGGTC TAGTTTGAC TTTTTTTTTT
82351 TTTGAAACAT AGTCTTACTC TCTTGCCAG GCTGGAATGC AGTGGCACAG
82401 TCTCAGCTCA CTGGAACTC CACCTCCAG ATTCAAGCGA TTCTCATTAC
82451 TCAGCCTCCC GAATAGCTGG GATTACAGGC ACCCGCCACC ACACCCAGCT
82501 AATTTTTGTA TTTTAGTAG AGATGGGGTT TCGCCCTGTT GGCCAGGCTG
82551 GTCTCGAAT CCTGAOCTCA GGTGATCCAC CCACCTCGGG CTCCCAAGGT
82601 GCTGGGATTA CAGGTGTGAG CCAACACGCC TGGCCGTTTG CATTTTTAAG
82651 ATAAAAATTT TACCATGCTG GATATATTGT AGTAGCTATG TACTTCAGTT
82701 TCTCAATTGT TAAACGAACT TAATAGAAGT ACTACCTTAT AGAATTTTGG
82751 GGATTAATG AAATAGTCTT CTGAGCACAA CAAATATATT ATCAGCACAA
82801 CAGCTAGCTC TATTGAGTCT TTATTATTAT AATAGCAGTA ATAGTCAGAC
82851 TTGGAAGGGG TGAAAGAGAA CAACAGTCCA TTTATTTTTT GTGGCATATA
82901 TATCATAGGT CGTAAGACCT TGGATTGTTT AGATGCCATG TTAACACTTG
82951 ACAAACTAG AAATGTTGTG AGTGTGCAAT AGCAGGTGAT AACTAATCCA
83001 ATCATTAATT TATCTTGAA TTTGATCAGA AGACAGACCT AACTTCATCT
83051 ATTGCCAATT ACTATTGTAA CAAAATCTAT TGGAATTTCA GTTTAGGCAC
83101 TGCAGTACAA CAGTGTGAAT TTCAAAGTG AGATATTTTA TGTGGCTTTT
83151 TAAAGTAGGT TTTCAAACCA GTTAAAGGCT CTAAAACCCA TTAAGAAGGA
83201 TACTATGGGT CAGGAATAGC ATTTTATGAG GACTCTTGAG AAAACGGTGC
83251 TGTGTCCCT CCACCATGGT ACAAGTGGAG GTTACTCTCA CTGTCTCT
83301 TACTTGGTAT CTCTCCTTGT TCTCTCACTT GGTATCGAGT GAGAGGGGCT
83351 TGAGAGGGAC GACTTAAGAG ATTTAAAGGA TTCCCCCAG TTGTGGGGAA
83401 CAGAGGACCA GGTCTGACT CTCCGAGACA CCAACCAAGG AGAGAAGTGT
83451 GGCTGGCTTA CTGTTCCAC AGAAAGAGCT ATACTGTAAT GGTGTCTGTG
83501 TTGAATTTGC CTACACTCCA GCCTTTGTCA GGGCAAAGGA AATGTATTTC
83551 CTGCAGATTA GAGGTGGGCC TAGCGGAGGA GAAGGGTAGC CTGGAGTTTG
83601 ACTCCTGTCC AAATAGATGC CTGAAAGGGC AGTGAGGTTT CAACGGTGAG
83651 TCTTTTGAAT GACAGCCAAA AAGCCAGGAG AAGAATGAAT TATCCAAGTC
83701 AATGGTGCTA TGGCCAGAAG GAACTCTGAG GTGAGACTCT GAATAACCCA
83751 TGAAAGTGCA TCTGAGAAAA AAGAATTAGC TTCAAACATC AGCAGACAGG
83801 TGTTTTGGCA GGAGGGCTCA TGTGGAATC TCCTTGCTT CCTTCCOCAG
83851 OCTCATCTC CCATGCCTAC CTTGGAAAGA TCCGACAGCT AGGGTTGGTG
83901 TAAAGTCGTG GAAGAGAAGA AAAGCAGCTG ATTTCAATCC CTCCOCAGGT
83951 TCCCTGGGG TGGGAAAAG ATTTGATTAC CTAGTGAATA TTGGTTTGT
84001 ACCTAAAGTG ACCATAAGCC TTTCTTTAAC ATTGACCAAA AGAATCAAAT
84051 GGGCCTGTTG AAGTGTTCAT CTAGTGTCAA GGGAAAATTT TTCCOCAGTG
84101 AATAAATTTT AAGAAGGCAG TCAAGACAAG AAGCTATATT TGATTATATC
84151 CTGTTAGTGC TTATTCAATA GACACATAAA TCTGTAATTT TTAATATTTG
84201 GTATAGAAGT AGGTTGAAAT CCACAGTAAT TCACAGAAAC TTGTGCAAGG
84251 GTTTTGTFTT CTTTCTTTT CTTTCTTTT TTTTTTTTTT TTTGAGACAG
84301 AATCTCACTC TGTCCCCAG GTTGGAGTAC AGTAGGATGA CCTCGGCTCA
84351 CTGCAGCTC CACCTGCCAA GGTTCAGCA ATCTTGTC CTGACCTCC
84401 TGAGTAGCTG GGATTACAG CATGAGCCAA CAGGGGGGC TAATTTTGT
84451 ATTTTGTAGTA GAGACGAGGT GTCTCCATGT TGGCCAGGCT GGTCTTGATC
84501 CTGACCTCAG GTGATCTGCC TGCTTGATC TCCCAAAGTG CTGGGATTAC
84551 AGGTGTGAGC CACCATGCCC GGCCAAGGTC TTTTTCTTG AAAATATCTT
84601 CACTCATATA AGCAGTATAT GCAATATAAG GATATGCTCT TGGGTTTCTT
84651 GATGTGGTCT AATATTTAGT GTTGGCCCT TAATTATAAA AGTTGCTTTT
84701 ATCTAAAAGT AGATGTTAGT TGTGAGCAA TGTGTGCTGT AAAAAATAAA
84751 TAAAAAATAA AAGTAGATGT TAGGATATTT TCTTCTAGCC TGCTAGTAT
84801 TTATATTAGA TTCTTTCTTT TTTTGAGAAA GCGTCTCGCT CAGCTGCCCA
84851 GGCTGGAGTG CGCAGTGGCG CGATCTGGC TCACTGCAAC CACCATCTCC
84901 CGGGTTCAAG TGATTCTCCC ATCTCAGCCT CCGTAGTAGC TGGGATTACA
84951 GGCACCCACC ACCAGCCTG GCTAATTTT GTATTTTAGT AGAGGGGAG

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FIGURE 3-25

85001 TTTCCACCATG TTGGCCAGGC TGGTCTGGAA CTCCTGACCT CAGGTGATCA
85051 GCCCACCTCG GCCTCCCAAA GTGCTAGGAT TACAGATGTG AGCCACCGCA
85101 CCCAGCCTAG ATTGTTTCTT AAACCATAGA TGTCTGAAC TTTTGAATG
85151 AAATTAATG ATTAGAGATT AGTAAATTT TTGTATAAGA TAGTAGACTA
85201 ACAAATCTT ACTAGTCTGG GTGTGGTGAC TCATGCCTGT AATGCCAGCA
85251 ATTTGGGAGG CCAGGCTGGG CCGACCACTT AAGCCCAGGA GTTTGAGACC
85301 AGCCTGGGCA ACATGGCGAA ACCTTGTCTC TACAAAAGAT ACAAAAATTA
85351 GCTGGTGTGG TGGCACACAC CTGTAGTCCC AGCTACTCAG GAGGCTTAGG
85401 TGGGAGGATG GCTTGAGCCT AGAAGGCAGA GGTTGCAGTG AGCAAACATT
85451 GCGTCACCGC ACTCCAGCCT GGGTGACACA GCGAGACCCT GTCTCATTA
85501 AAAAAAGAAA TTTAACCTGT CTCAAGCTCT CCATACTGTA AGGCTCTGCA
85551 TGTCTTGATT GGATTGTGCT AATATATTTG GCCAATCAGC TCCTTCTAC
85601 TGTCTACTTT TGAATCCCTG TCACCACCAT CTAAGTCAAG ATGACAGTGT
85651 TTACACAGTC TCTTCATTGT GTTTTAAGAT TATAGTCTTC TTTCTGGTGA
85701 GGGAAAGAAAG AAAATAGAAA TATGGCTTAC TGATTGGGCG ATGGCTTAAG
85751 CCTGCAATCC CAGCATTTTA GAGGCCAAGG TGGGAGGATT GCTGGAAGCC
85801 AGGAGTTCAA GACCAAGCTTG AGTAGCAAAG TGAGACCCTG TCTGTACAAA
85851 AGAAACACAC ACAAAGAAA TATGACTGAC TAAAATACAT ATAATTTTCA
85901 TAATACTTTA AAATGTAAGA AGGCAAAAAA TTTCTGGGCT CAAGGTGGGT
85951 GATCGCTTGA ACCTAGGAGT TCAAGACCAG CCTGGGCAAC CTGGCAAAAC
86001 CTTGTTTCTA CAAAAAGTAC AAAAAATTAGC CAGGCATGGT GGTGCACACC
86051 TGTGGTTCTA GCTACTTGGA AGATTGAGGT GGGAAATTTG CTTGAGCCTG
86101 GGCTGTGAG ATCACAGTGA GCTGAGATTG CACCACTGCA CTCCAGCCTG
86151 GGCAGCGGAG TGAGACCTTT TCTCAAAAAA AAAAAAAA AAAGGCAAAA
86201 AATTAATTA TTAGTATGGT AAAGTTTCTG TTGGAATTA TATGAACTC
86251 ATTTCTAGAA ATGATGATCA TTTGCATAGG GCTTAACCTC CTTTGCTAAG
86301 AAAATAGAGT AGTATACTAG GAGACTTCCA GAGCTGCATA GAGCTTCAGG
86351 GTCATCTACC AAGACAGACA ATTTGTTGTC ATCATTAGTG TTAACCTCTA
86401 AATTATTAAG TGCTTATGTG CCAGATACTG AAGTTTATAT ACACCTTCTC
86451 TAATCTTTAA TAATTCTAGA AAGGTATGTG TTTGATCCAT TTTCAAGATA
86501 AGAAAACTCA TTAGAGGGG AAGTAACCTG ACCAAGAATA CGTTGTAGTT
86551 GTAGAGCTGG GAATATGACT CATGTCTGTT TTTTCCATAG CCCATTTTCA
86601 CTTAGGTTCC ATTAGTTTAT TATATATTTT AGAAGGACTT ACAGACTTGA
86651 TTTCTCTCAG GAAGTCAGAT TACTCATTTT TTTGGCACAG AATTATGATT
86701 ATTTGTATTT AATATTTCTT TCCTGTGGT TTTTATTTT GAGTTTATAT
86751 GGAATCTGAC TTCTGATTCT CAATTTTTTT ATTGTGAAAT ATAACATAAC
86801 TTCAGAAAAA AAGATTAAC ATATCTATGG TTTTATAAAT GATTATAAAA
86851 TAAATACCCA GTAACATTA TCCAGGTCAG CAAATATTCT ACTAGTGTAT
86901 GAGTCAATTT CCATGGCAAA AGAAGTAAAG TTAGGCACTA TACTCAAAAA
86951 AACTAAAAAT AAAATTTTTC TAAATGTGTA TTATATCAAT GGAATAAATA
87001 CAAATATAAC TTACCATGTC ATAATTCCCC CCACGCTTTC CCTTCTTTTA
87051 CAGCATGGGT AGGTTCTCTC TCCATGGGGA TGATTTTCTT TTGCTGCCCA
87101 ATAGTCAGCG TCTTCACAGA CCTATTGGT TGTGGGAAA CAGCTGTCTG
87151 GGGTGTCTGT GTTGATTG TTTGGGCTCAT GTCCAGTTCT TTTGTAAGGT
87201 AAGGACTTGG TTTTTCATG TTGCTTTTTA AAAACTGTTA GATACTTTAA
87251 AGTTTTACTT TCAGAACTA TGCTATTTAC AAGCAAAGAT CCTCCTTTTC
87301 ATTTTTTAAA ACTTTAAGCA ATATGACTTA TAAACAAAC TGTATCCAT
87351 AGCAGCAAT CAGAGCTTGA GAATTTGAAT GCTTTTTTTT CTTGTAATGC
87401 CTAAGACTTA GACATCAATC AGGATATATG TGTTTCTTGG TGCATGGAAA
87451 AATGTTTCTC CTATCTTTT TCTTCTATT ACATAAAAAA CCTAATGGCA
87501 CTCAAGTTAT AACAATGATT TATCTAAAAC AGCAGCCTTA GTTTAGGGTC
87551 AGTTCAGTCT GAGGCCACG GGTACAATA AGTGGTGT TAAAGTAGCT
87601 GTTCATAGGC TTGATATGAA ATATTTTGT TAATGAGACC AAAACTTTGC
87651 CATTTATTCC AAGCCAGGTA GAGAATTCCT GTCTGTCTT TAAAAAAGA
87701 ACATGCTAAA ATTTTAAAT ATCATGGCAA AATGAAGTGG TCCAATGTAC
87751 CTTAAATATA AACTTAATGT CAATGTACTT CTCCTGTATC TATTAGAATA
87801 AGGATCCCCA ACCCTGTG CACAGACTGG TAAGGGTCCA TGGCCTGTTA
87851 GGAATTGGGC TGCACAGCAG GAGGTGAGCT GTGGGTGAGT AAGCAAAGCT
87901 TCCTCTATAT TTATAGCTGC TCCCATTAC TTGCATTACC ACCTGAGCTC
87951 CACCTCCTGT CAGATCAGTG GCAGATTAG ATTCTTCTAG GAGTGCAAAAC
88001 CCTATTGTGA ACTGTACATA TGAGGGATCT AGGTTGCACT CCCCTTATGA
88051 GAATCTAAAT GCTGATGAT CTGTCACTTT CTCCGTCAC ACCCAGATGT
88101 GACTGTCTAG TTTTCAAGAAA ACAAGCCAG GATTCCCACT GATTCTACAT
88151 TATGATGAGT TGTATAATTA TTTTATTATA TATTACAATG TAATAATAAT
88201 AGAAATAAAG TGCACAATA ATGTAATGCA CTTGAATCAT CCCTAAACCGC
88251 CCTCCCCCGG CACCATCCAT GGAATAATTC TTCTGAAAC TGGTCTCTGG
88301 TGCCAAAAAG ATTGGGATT CTGTATTAG AAGAAAAGAC ACAGTGCACT
88351 GAAGAGGGAC TCACTGTAAG GAACGGATGG GCACATAACT GCATGGAACA

FIGURE 3-26

88401 TCTCTCCCTG CAGCTCTAGT TCTCCTTGTA AGTCCCTTGC GTTGGTAGAA
88451 TAATCCTCAG TTAGACAAAC ACTGATTTAA TATGTAGCTC TGGCTAACAG
88501 GAGGTGATTA AGAAGAAAAC CTCTTAAGAT GATTTCCATC CTTTGTCTCT
88551 ACTTTAGTGG TTTATCTTCA TTTCTGCTCT CTTTCTGCTC CCTAGCTGTC
88601 TTTATGCTGC TTTAGTTGAA AAGCGTTAAT GTGGTCATTA AGGAAAAATA
88651 AGTCAAATTT ACATTTGACT TTTTATTTTT AAATATTTAA TCAACAGAAT
88701 CCTTGTTTTT ACTCATTTGCC GCCCCCACC CCCCACACA CATCCCTTCC
88751 TCAACTCTAA AGTGAGCCTC ATTCTTTTAT ATTTTCTTCC ATCTAATTTA
88801 GAAATTTCTAT TTGGATTTTT AAAAATTATA TTTATTTCTT TGTAGAAAAT
88851 AGATATTTTC ATCTTTAAAG TACCTTTATG GGTTTTTTCT TCTAAAATTG
88901 TTTTTTAAAG AAAAAGTTT TATTTGGAAT AAGATTTCTG TAGGTAATTC
88951 CATGAGATGA TTTATTTTAG CAGCAACATA ATATTTACAT TATTATTAAT
89001 GTAATTAATG TTATTAATAC CTCATCAGAT AGCTTCTTTG ATCTGGAAGC
89051 TTCCAGGTAC CTATTGTGAG TACTTGTGGC TCTACCACTT GCCGAATGTA
89101 TTACAACTCT AGTTGTGGTA GAGAGGGGAC TGAGAGGTAG ACAACTTATG
89151 TAATCTACTA CCTAGTTTGT TAACAAAACA CACATACAAA GCAATGTTTT
89201 TCAAATTTTT CTGACCACTG AGCAATAAAA ATTATGACAT ATATTTTGAT
89251 GTGACCCAGT TCTGTCTCTC TTTCTCTACC CTCTAAGTGA AACAAAATTT
89301 ATTGAAACCA AAATTTCCCTT ACTACATGTA ATATTTCTCAT ATATTTCTATT
89351 AAATTTCTGT ATTTAGCTTG CTGATCAAAG GCTACTGAAA CTGAGAGCA
89401 AGATACAGGA GCAAGGGGAA ATGTGGTATA GATTCTGAGT GTCAAGTGGC
89451 AGGTCCATTT TTTCTCTAG CTCCAGTTCT GCCTTCTGAG GAAAACTTC
89501 TCCAACAACCT TAGGTCAATC ACACCCATGT CCCTTCTCTG AATCCTTTTT
89551 GCACATATGA TTGGTATCCG ACAGCCTTAC TCATTTACAT TGCACCTATT
89601 TGGCTGCCAA ACGTCACAAA CTGGAACCAT GTGTTACTGA AGGGAACACC
89651 TGGAAAGTGA AAGGGTTGCA CAGTAGTGCA AATACCATCA TAAAGCTCAT
89701 ATACTTCACT CTGCAGGAGG GAGAAGCTCT GTGGTTTTCC AACTGAGAGC
89751 ATTACAGTAC AGTGATACCA CTGTACAGGA ACTGATGTTC CTGATGATTG
89801 TGCTGTGAAC AGTATTTTTA ATATACACTT TGAAGAAGGC AGAGAGAAAT
89851 GTATAATAGA CTTAAATTTT TTTCTTTAAA ATTGTTAAAT AAAAACAAAT
89901 AAGCACTTTA AGTAAGTTAC AATTATCTGG AAAACTACTT AGGTGAAAAA
89951 ACTGATACAG AATGAATGAA GTATTAATTT CTGTTTTGTT CTGTGTTATT
90001 ATTATTTGGG ATAGATGTCT TGTTCCTTTA AGCAGACTAT GAATATCTTG
90051 AAGGCAGAAC CACATTTTTT TTTTTTTTGA GACAGGGTCT CACTATTACT
90101 CAGGCCAGAA TGCAGTGGTG TTATCATAGC TGACTGCAGC CTGGATTCTT
90151 GGGTTCAAGC CGTCTCTCTG CCCCAGCTTC CTGAGTAGCT AGGACTACAG
90201 GCATGTGCCA TCACACCCAG CTAATTTTCA CTATTTTTTT TTTTTTTAAA
90251 TAGAGATGGG GTTTTGCTAT GTTGCCAGAC TGGTCTCAAG CCATCCTCCT
90301 GCCTTGGCCA CCCAAAGTGT TGGGATTACA GGTGTGAGCC ACCAGTCTG
90351 GCCAAGGACC AGATTTTTTA TATTCCTTTC CACAATGTAT CTGGTACACA
90401 GTAGTTGCTT AATATGTTGG CTAACAACAG AGTGGAGATT CAGTAAAGGG
90451 TGATCAGAGT GAGGTGAGAT TAATTTGGGA AAGCCTAGAA GTGATTCCTG
90501 AGCCTGATTT GAAGGTGGTG CTAGCTGTGG ATTAATAGAG GGAGAAGGGC
90551 ATCTCAGAGA GAGGATTGCC AACATGCCTT AATTTTATCA GATTCTAGAG
90601 TTTCTTATGA TTACCTCAGC ATGTTGCTAG ACTAGCATTG TTATCCAAAA
90651 TTTTAATTAT TAACCAACTT TAATCTTACT TTCTAACAAA TTGTTTGCTT
90701 TTAATCTTGA TAGCCTTTTC AAAAAACTTT AACTAGTTT ATTCTTACC
90751 ATAATTGTTT CAAAGAACAT AATGATATGA TCCTTTATCT TCCTAAGAAA
90801 TGTGCAATTA TTTGGTTAAA CTGTAAAGAT ATTTAATCCA TTATTTCTTT
90851 GACACATGCA TGGCCTTACA GCTTACAAAC TGGGATCACT AAAGGAATAC
90901 ACTTAATTTA AGTCTTTCTG TAGTCAGAA ATGATTTCTT GTTGCTTGC
90951 ACAATACTGA GAACAGTGCA GTACAGGGCG AAGGTGTGTC TACAGCCCTT
91001 AGGCCAGCAA AAACAGGCAC AACTGCACCT CTGTGCAAT GTTCTTGACA
91051 TAACCTTGGG GAAAAAATAT AAAATGGGCG CTTTTCTTT ACTACCTTGT
91101 TTGGTAAGTA CTGGAAGAAA CTCCATGAAA TAATTAGATT TCATAGTTAA
91151 TTCTAACTTT TTTAAAAAAT GTTTCATTGA GACTAGGTTT TTGGTTTGT
91201 AATTGAATCA CTGTTGATTT TACCTTCTCT GGCACCAACC TTTATTTCTG
91251 AGCTGTGGAG AGCAGGTTTC TCACTCAGTG CTGTGTGCGT CACCTGAAAT
91301 CCACAGAAAG AGGTGGCTGA ACAAATCAC TGATGACCTT AATGGTTATT
91351 TTTACATAT TCAGATTAAA TTAATAACG TTTAGTGCTA CATGCTTGAC
91401 TTAATGAGTT TTTCCCTCTA TTTTGGTTAA TTTTTTTTT TTTTGGTTAA
91451 CTTTTACTTG TAGAAAAATAT GTTGATGAAC AAAAACCCAC TTATACTATA
91501 AGATTTTATT CTACCAAGCA CACAGTAACA ATATTGAAAG CTGCTTTCCA
91551 TCTTTTTTCT CTTTATACAG TTCCATCGAG CCTCTGTACC TTACCTATGG
91601 AATCATATTT GCCTGCGGCT GCTCCTTTGC ATACCAGCCT TCATTGGTCA
91651 TTTTGGGACA CTATTTCAAG AAGCGCCTTG GACTGGTGAA TGGCATTGTC
91701 ACTGCTGGCA GCAGTGTCTT CACAATCCTG CTGCCTTTGC TCTTAAGGGT
91751 TCTGATTGAC AGCGTGGGCC TCTTTTACAC ATTGAGGGTG CTCTGCATCT

FIGURE 3-27

91801 TCATGTTTGT TCTCTTTCTG GCTGGCTTTA CTTACCGACC TCTTGCTACC
91851 AGTACCAAAG ATAAAGAGAG TGGAGGTAGC GGATCCTCCC TCTTTTCCAG
91901 GAAAAAGTTC AGTCTCCCAA AAAAAATTTT CAATTTTGCC ATCTTCAAGG
91951 TGACAGCTTA TGCAGTGTGG GCAGTTGGAA TACCACTTGC ACTTTTTTGA
92001 TACTTTGTGC CTTATGTTCA CTTGGTGAGT ATGCTCCTTC ACTGATCATG
92051 AATATTACTA TTTAATAAAG AAAAAGTTCT TTGAAGAGAA AGTTAGGTGG
92101 AGTTAAAGTT GGCCTCAAAC ATTATCCTGG TTGTAATTTT GGTATTCCTG
92151 AAATGAAAGG TCTCTCAAGA CAATGTCAGC ACATCCATTA GACCACTAAA
92201 CAGAGAGAGT ATGTTTCATA GTGTGCTTTG GTATTTTAAA AACCCCTGCA
92251 ACCCAGCCAG ACACCATGGT GCTGTCTAT GGTCCCAGCT ACTAAGCTGA
92301 GGCAGGAGGA TCACCTTGAGC CCAGGAGTTC GAATCCAGCC TAGACAACAT
92351 AGAGAGACTC TACCTCTAAA AATAAAATAA ATGTCCCAA ACAAAACAAA
92401 TGTTTTTTAA CAGGAAGGCT AAAATAGTGG AACAAATTAC AATCAGTATA
92451 AAACATTTGA TAGGTCTCTT TTTCTTCATA TGGCTTTTAT CAGGGACAAA
92501 GCTAGCGCTA TGATTTTGCT ACCATAAGTA AATTGTTTTT CAACCGAAGG
92551 GTGTAGGTAA TTAGCAAAAA AGCCATGATG TTGATACAAA GAAACATTAC
92601 ATCTACTTGT GGTACACTTC TGGGAAAATG GGAATTCTAT TCAGAGGAAT
92651 ATCTGAGAAA AGTTACTCAA GATCTAAATG AGGAAAGAGA ACTATGGTTT
92701 TATAGGAAAT TAGGATTTCA AGTGCTCAAG AAGTTTATAT TGTATTATTC
92751 TATTTCAAAG GCAAAATTCA GCTTTGTTAT ACTGAAATAC GAATAATTAA
92801 TGTCTAGACT TGGGTTGGTG CCTCAGCCT GTAAATCCCAC CACTTTGGGG
92851 GGCTGATGCA GGAGTTCAGG ACCAGCGTGG GCAACATAAG GAGACTTCAT
92901 CCTACCTGG GGAAGGAAAA AAAAAAAGA AGGAAGAGC AGTGCTTAAA
92951 GTATCTGCCC CTGGCAACGT TTGTTCAAAA GTGTTTATTA TGTCTTCTCC
93001 TTTTTTCTT TGTGGCTGAA AATGTATTTA CAATTCACCG TAAATGATAA
93051 AAATGGCATT GGCACACATA TTTGTATGTT TGTGAAGTGG GATTTTTTTC
93101 TAGCTTACAG TCTACTTTTG GAGATTTGTG CAATTTTCT TTAGTTAAGA
93151 AATAAGTATA AATATAACCG ATTTACGGAC TATCAGGCTA CATCCTGATC
93201 TGATAGTCCA TTTTCATACT ATTAGGAAAG TATAGCGGAA CCAACTTAAG
93251 GTAAGTTTCC TGAATATAG ATCTGTTGTG ACAGGATTAA CTTTACCATC
93301 CAACCTCTTT CATAGCTTCT GTAGTCAAGA GAACATTTAT TGTGTCTTT
93351 CTTAAAAAGA TGAGTAGAAA TTCTTTTCT TTTTTTCTT TTTTCCAGAC
93401 AGGGTCTTGT TAAGTTGCTC AGGCTGGCTT CAAGCAACCC TCCTGCTCA
93451 TCTAGGATTA CAGGTGCAAG CCACCACACC CAGCTTTAAA AAAAAAATTC
93501 TCTTTGGTAC TACCACATGA ACACACCTAG AGAAATCATA ACTCAGCTTT
93551 GCTAATACTA GACATTTACC AAAGGAAAAG TGGTAGATGA CTGTCTAGTT
93601 ATTTTTGGTT ATATATTTAT AATTTGTAAG TTAATTTTAC ATATATTACT
93651 TCATTTGACT TTCACAATAA ACCAGTAAAG CAGATAAAAT AAATATTAGC
93701 TCCAATTTTA CAGACTGAAA AACAGATCTA TTGTTAATAG AGACGTTAAG
93751 TGATTTTCCA AGAATTACAT GTCAGTAAAC AGCAGAGCAG GAGTTAGTTC
93801 TCTTCCACTG TGCTTACCTG GTAGCAAAAT CAGTCTACAG TCTTAATAGC
93851 ATATTGGGCC ACTTCCCTGG ATATATTACC AAATGTGTCC ATCTATTAG
93901 GGGAAAAATG AGTATGCTA AGGAAATTTA ATAAGCATGT TATTTCTTCA
93951 GGTAAATAAA ATTTCATAGT GGAAGGTGAG TTAGACAATG TTATAGATAC
94001 TTTTGTGATC AGGAGATGGC AAATCAGATG GTGCACAGAA CAATAAAGTC
94051 TCTGTTAATT CTGTTAATAA ACCATGCCTT TTTTCTGCTT TCCCTTCTTC
94101 CAGGCATGTT TTCTTACAAA ATATGTTGAC ATTGTTTATT TGAGATTTTC
94151 TCTTTCTCAT AACGGTGCCC GTTATCGCAC CGAATGCAGC ACGGTAGAGG
94201 AAAGATCAGA TAGCTAAATG CCATACAGGT GTTTAAATCT CCTCTTTGGT
94251 TATGTACTGA GTTTGTCACT TTGTTGTAAT TTAAGGTTTG AATTATGGAT
94301 ACTTAACCAG GAATGGGACA CTAGTTTCTT CCTTATACAG GGAAAGGTG
94351 TCTCATATCC TTCAAAAGAC TAGTAAAGTA GATGATGTTT AATTCTACT
94401 AAACCCCTTTA TTGACTGTTG AGGGGACACA TATATGAGAC GTAAAAATTT
94451 GCTCTGAAGG AGCATAAACC TAGTACATGT AATTAAAAAT GGCTACAGTT
94501 TATAAAGCAC TTTTACATAC ATTCTCTTAT TTAATATTCA CAACAATGCA
94551 GTACCTGTGG TGTATCCTCT TTATTTTCATG GAAGGGAAGA CTAAGGCCC
94601 GAAAGATTAA ATAAGTTGCT CAGCCAGGCA CAGTGGCTCA CGCTATAAT
94651 CTCACCATTT TGGGAGAATG AAGTGGGAAG ATCACTTGAG CCCAGCAGTT
94701 CAAGACCAGC TTGAGCAACA TAGTGAGATT CCATCTCTAC AAAAAGTAAT
94751 TTAATAAAAT TATCTGGGCA TGGTGGTGCA TGCCTGTGGT CCCAGCTACT
94801 TGGGAGGCTG GGGTGGGAAG ATCGCATGAG CCCAGGAGGT CAAGGCTGCA
94851 GTGAGCCATG ATGGTGCGAC TGCACCTCAG CCTGGGTGAC TGAGTAAGAC
94901 CCTATCTCTA AAAAAAATTA TAAAGTATTC TAAAGGAAGA ACAGATTGAA
94951 CAATTTTTTAA TTTATTTGTC TCCTCCTCCT AGTGGCAGCC TTTTAAATAT
95001 GGAAGGTGAA GAAATAAAGA GCCAGATGTG GTGGTACACA TCTGTAGTCC
95051 TAACTACTCA GGAGGCTGAG GCAGGAGGAT TGCTGGAGCC CAGGAGTTCA
95101 AGGCTGTGGT GTGCTATGAT TGTGCCACTG CACGCCAGCC TGGGTAACAG
95151 AGCAAGACTC TGTCTCTAAA AAACAGATAA TAAATAAAGA AGTAACTTGC

FIGURE 3-28

95201 TTGAGGTCAC AGAGATAGTG ACTGATAATT ATTACTGTAG TACTTTTATG
95251 TAAGAGGCAG TATTGTATAG TGGTTTAAAA GTGAAGGTTT TGGGCCTGGT
95301 GCGGTGGCTC ACCCTGTAA TCCAGCACT TTGGGAGGCC AAGGCAGGTG
95351 TATCACCAGA GGTCAAGAA TTTGTACCAG CCTGGCCAAC ATGGTGAAAC
95401 CCTGTCTCTA CTAAAAGTAC AAAAATTAGC TGGACGTGAT TGCTTGACCC
95451 TGTAACTCTA GCTACTCAGG AGGCTGAGGC AGGAGAATCG CTGTAACTTG
95501 GGAGGCAGAG GTTGCAGTGA GCTGAGACCG CGCCATTGCA CTCCAGCCTG
95551 GGTGACAAGA GCGAACTCC ATCTCAAAAA AAAAAAAAAA AAAAGTTCTG
95601 AAGTAAGACA GATCTGGATT TAAATTTCAGG TTTTGTTCCT TACTAGTTGC
95651 ATAACCTTGG GCATCCTCTG TAAGCATCAG TTTCCTCATC TATGGAGATA
95701 AACCCAATTG TGCAGAGTTG TGAGGATTAG ATAAAAATGTA TGTGAAACAT
95751 CTACCTCAGT TCTGGCATAA AAATGGGAGT TATTTTAAATG TAAGGCAATG
95801 TGATTGCCAA CTTGAGATAG AAGTAAATTT TGAAAGGAGA AAGATAATAC
95851 CCATTTGGAA AAGTGGTTTT AAAAAGTTTC ATAGCATTGG AGTTGGGCCT
95901 TGAGCATGAG ATTTTGTGTA CAAATCTGAT CTTTGATCAA CTAGGGAACCT
95951 AACTTACCAG TTTAGGTCCT TGAAGATTCA GAAATACAAT GGAGTGCTCT
96001 CATTGCTATG TTAATAATTC TAAGATCTTA TTAGATTGTA CATGATGATT
96051 TGAGAGAGAA TATGTATGCT TGCTTTCAAA GTGAGGTTGG AGGTTTGATC
96101 TTCTCGTAGT TGACGTTTCA AAAAGAAGAA TTAGATTGGC TCCTCGAAGC
96151 TAAATTTACC TTTCTTTTAG GCCTTCCAC TTAATACTTT TTTTGAAGG
96201 ATACAAATCT TATAGATCAA TTTAGATGAG GCCTAACTTT CTAAAAACGA
96251 TTCTAGTAG CAGCTGCATC AGTTTTTATG AATTGCCCT TTTGCCCTGAG
96301 AGTTGTTTTG TTTGTTTTTC TGGAACTTT TTTTGTTCCT TTTTGTTCCT
96351 CTTTGTTCCT GTTTTCGTTT TTTTGTGAGA CGGAGTCTTG CTCTGTCTCC
96401 CAGGCTGGAG TGCAGTGGTG CAATCCCGGC TCAGTGCAC CTCTACTTCC
96451 CGGATTCAAG TGATTCTCCT GCCTCAACCT CCTAGTAGC TGGGATTACA
96501 GGGGCTGCC ACCACACCTG ACTTAATTTT TTGTATTTT AGTAGAGACA
96551 GGGTTTTGCC ACATTGGCCA GGCTGGTCCC GAACTCCTGA CCTCAGGTGA
96601 TCCACCCATC TTGGCCTCCC AAAATGCTGG GATTACGGGT GTGAGCCACC
96651 ACGCCCTGCC TCTGGGTTTC TTTTTTTTTT TTTTTTTTTT TTTTCTTTT
96701 AACGGCTCCT CTGACTCCTC TCATTTAGCT TTCAGGAGCA TAAACTCTCT
96751 TGGTTTTCTG CCTAGCTCCA CATCACTCCT CCTTAGTTTC TTTGCTCACT
96801 TCTTCTTTTT CCCACTGACC CCTGAATATC AGCATGTCT AGGGCTTGTC
96851 CCCTGATCTT TTTCTCCATG TATTCTACTG GTGGTTTCAT CCAGTCTCCT
96901 AAGTTCATAC ATCAAGTATA TGTCAATGAC TTCAAATTTA TAATTCGGT
96951 CCAGACCTTT TCCTGAATC CTCACCCAGA GCTGTATATC CAGCTGCTTA
97001 CTTAACATCT CCACTTGGGT AACTGCTAGG TGTTTCAGAC TTACCTGTG
97051 TAACCCCTGAG GTCTTGATCT TACCCCTTAA AACTTACTCT GCGCCAGCC
97101 ATCCTCATCT CAGGAGCTGG CAATCCCGCC CTTTCAGTTG ATCAGACTCA
97151 AAACCTTGGG GTCATCCTTG GCTCTTCTTT CTGACACCC ATAGTCTCTG
97201 TCCAGTGAAG AAATCCTGGT GGCTTTTCTT TCAAAATATA TCCAGGATCT
97251 GACCACCTCT CACCATCCTC ACTACTCATA CCTTAGCCCA GGCTACACG
97301 TACCCCTAGC CTGGATCACT GGCAGAGCCT OCTAACTGGT CTCTCTGTC
97351 CTTCTCTGCC CCGCGGAGTT TGTTCTCTAT GAAGAAGCCA CAGGCATTCT
97401 TTCTAAACAT AAGTCACTCT GCTCAGAATC CTTCAATGGC TTCCCATTTT
97451 CCTAAGAGTA AAAACCAATA TCCTTACAGT GACCTACAAG GTCCCTTACA
97501 ATCTGGCCCC CACTACCTCT CCGAGCTTCC ATCGCTGTCC CTTGCCACT
97551 CTGCTTCTGC CATTCGCCCT TTAATGGGGC TCACTCTGAC TACCTGCTTG
97601 AAACCTTCTG CGTCCCTTTT CCCCTGAGTA TTCACAAAC GCTCCTAGTA
97651 CTCTTTTCT TTTTTGTAG CACTTAATAC TTTCTAATC TATCTATTTT
97701 ACTTCTTTAT TGTAGTCATT GCTTACTATC CGTATATTTA CACGCTGCT
97751 AGAATGTAAA CACCACAAGG GTAAGGATCT ATTTCAATCA GTGGTAGATC
97801 CCAAGCATCT AGCACAGTGC CTAGCACACA CTGGGTGCTC AAATATTTGT
97851 TGAATGACTA AATATATTCT GGGTGAGTCT GAAGTGACAC TGTATAAGTA
97901 ATGTTCAATT TTTCATCATT TGGATCTTTA AAATCTCTTA CTTTGATGCT
97951 ATAATGATTT TTCAATTTCT GTACTTGAG GACATGGTGT TATTAATATT
98001 TATTCAATAC TTATTCAACA AATAAGCTCA AACTAAGGAA ACCTCGGAAT
98051 AATTGAGTAA CCAGTAATGC TGTCCGTTGA TGGAGGAGAG AGTTGGTGTG
98101 TTTTGCTCTG ATTCATTAT GCCTTTGCTG AAATTTTAAG ATAAATAGAA
98151 GAAATTTCTG GTCCCTCAAG TAACTGTGTC TTCAGTACCC ACTGAAAAAT
98201 CTCAAAGAGT CTGGAGTGGT GTGTTTAAAG ATAGGATGCA GGATGCAGAA
98251 CCATAACCAG GCCTCAGGTC TGCATAGCTT TGGTCGAGCA TTGAGCATAG
98301 GGCCCTCGTA GATAACTGAT AAATGCCAAA TATGACAATG ATAAATGACA
98351 AATATGACAA TGATAAATGC CGAAGAATGA CAGTGACAAT GATAATGAAG
98401 TTACCAAAAA TGATGGTAAC TTTTCTCATT GGCATGAAAT GCTCTATCTC
98451 CAATCTGAAG CTGATGATGT AGTTTCAGTT ACTCTCATCT CTCTCCCTG
98501 CTACTCAGAT TGAAAATCAG CTACTTAGTA CCTGTGTTCT TTGACTCTAG
98551 ACCATATCAT TGGGTCAAAT TTCAGTTTTT AAATTTTAGA TCCACATGGT

FIGURE 3-29

98601 TCTCTGTCAA GAAGATGACT GACTCATATT GAAATCTGTA AAATATGTAT
98651 TCATTAGCCT GTTTTTTAAA AACTCCCTTA TAAGTGGGTT GACTTTGTGG
98701 CAGATAGTAA TTGACTGTTC TCAAAAGAAA CTTTGACCTG GTAGGAAGAT
98751 CCCATTACC TGATGCTATG GTTCAAGACA GACAGATCAT TTGCTTGCTA
98801 GCAGGGCAAT TAGGTGAAC TCAAGTCCAC TAGTAATTGG AAATGATTTT
98851 TTTTTTTTTT TGAGACTGAG TCTCATTCTG TCGCCAGGC TGGAGTGCG
98901 CGGCATGCTC TCGGCTCACT GCAACCTTCA CCTCCTGGGT TCAAGCGATT
98951 CTTCTGCCTC AGCCTCCCGA GTAGCTGGGA TTACAGGTAC CTGCCACCAC
99001 GCCTGACTAA TTTTTGTATT TTTGGTAGAG ATGGGTTTCA CCATGTTGGC
99051 CAGGTGTGTC TCAAACCTCT GACCTCAGGT GATCTGTCTG CCTGGGCTC
99101 CCAAAGTGCT GGGTTATAGG CATTAAACCAC CGCCCTGGC CATGAATTGT
99151 ATTTTTTAAAC CAGAAATGAA AATTTGAGAC TAATAAGTCA GTACAGGGAG
99201 CATGTAAACC TCGAAAGGTA TTTTTTAGCT TTGAGTAGTG CCAGATGCTG
99251 CCAAGGGTCA ATCAACACTG GAATGTAGCT ATTAGACCTT GCTAGGCAGA
99301 GCACCTCCAT TTACACTGTG GTCAGAGCAG CAGTACTGCT CCAAGCCAGA
99351 GCTAAGGGCG CTGAGCCACG CAAATAGGAA CAGCATACAA GCCTTCATCT
99401 CTCTGTGGCT TCCTCAGAGG GAGATTTCATG TAACATTTGC CAAGAATTGA
99451 TTATGTGTCA AGCACTTCCC CAAAATCTCA CAGAACCAAC ACAAGGATGA
99501 GTGTAATAAA TAACACATAC TTAGAGCCAA GGAAACAATT CTGCAAAGCT
99551 GTGCTTGTTC AAAGCCATTC GCATTATGCT TAAAGCTGGG ATTTGAACAC
99601 AGGTTTCAGA CAAATATGTC TGAAATATAC TCTTTTATG AAGGAGTCTG
99651 CATTCCCTCA TTGCTAATCC AGAGATAGGA GTGCTGCTAT TTTAGCCAT
99701 ACTGGGCTCA CACCAAAGAT TGCTTTGCAC GTTTCCTTC TGTCTCTCA
99751 GAACGAAGAA CAGAGGCCAT GTTGAGCTGT TCCAGCGCTC AGAGCATGCT
99801 TCACAGCCAG GGAGAAAAC CTGGAGGAAA CCAGCTTTTG TTTTGATATA
99851 ATTAATGGGA ATGAGAAAAT ATCTATACCC TTATTTTCAG CCCCACCTTC
99901 TCTTTTGATC TCAAGTACAT TGTGAATATG AGAAAACCTGA GGCCATGCAG
99951 TTACTTTTCA CAACCTGTGA CAAGCAGAAC ATGGACCATA CATAGCTTTG
100001 TGTTCATTTT TGCTTTCTAC AGTAAACATT AAGCATAACA GAAGAACAAA
100051 AATGGACATG TACAAATTTA TAGCAAGATC TATCCTTTAT TTGATTAAAC
100101 TAAATACTAT TGCAGGAAAA TGGAAAAAGG TAAACTGCTT GAAATTTAGT
100151 CACATATAAA CGCTCCGAGG CCACTGGTGG ATCATTAGTC TCCTGAGAGA
100201 GCTCTAAAGA ATTAGTGTGT TGGAAAACTG TTCCCTCCTG TTAATGTGTA
100251 AATTTACCA GTGGGTTTTT TTTTTTTTTA AGACAGGGTC TCACCTCTCT
100301 GTCCAGGCTG GTATGCAGGG GTGCAATCAC ACCTCACTGT AGCTTCGACC
100351 TCCCGGACTC AAGCAATCCT CCCACCTCAG CCTCCCAAGT AGCTAGGACC
100401 ACAGGTGCAC ACCACCACAC ATGGCTAATT TTTAATTTTT TGTAGAGATG
100451 GGGTTCTCAC CACATTGCC AGGCTGGTCT CAAACTCTCT TGCTCAAACA
100501 ATCCTCTGCT CTGGCTCCC TGCCAAAGCA CTGGGATTAC AGGTGCAAGC
100551 CACTACATCT GGCTTCACT AGGTTTTTCA TTTTGTTTTG CATGTGTCTC
100601 AGGTTTTATT TGATAAAATG CAGTATACTT TGAATCATCT CAAATTTTCT
100651 TTCTAATATG GACATTGGCA TGTCTCAAAT CCTTGGACTA ATAATCAAAT
100701 TAAAGTTTGT TCAAGTTTGA GGAACCTAAA TTAGCCAATT AGATAAGGGT
100751 CCTTTCATGT TTTTATATCA ACTAGAAAAT AAATTGTTTT GATATGGGAT
100801 GAATAGAAAT AGAAATCTTA ATTTGAAGAA TCTTCCCTT GTGAGGCTAT
100851 ACTAAATGGC TTTTGCTGTA TATTTACAAG GTGGCTTTGG GTTGTGGAGA
100901 GAGTTGTCTG ATCCATTGAG AGTACATTTC TTACCTTCAA CATCTAGGGC
100951 ATCCTTTGGG AGAAGCCCTT GTAGTCACTA ACTCTAAGGA TCATAGAGCA
101001 TAAGGGTAAG CAGGCCCTCT TATGTATTCA TGCTATCAGG AAGGGTCTTT
101051 AGCACCCAAA CAAAGTTCTA GGGGCTGTAC ATTGCTGATG TGTAAACCTT
101101 CAGCTGCCCA TGTAGCATCT ATTTACCCCT ATGCTTTCCC CACTTTCTAT
101151 CCTATCATTT ATATCTCTGG CTCTTTTGCC CCTCTCTCCT TGGGCAGCTT
101201 ACTTGTAATT AGAAAGTTTA TATCCCTCA TAACATATTG TAAAAGTGCT
101251 CATTTAAAGG GCAATGCACA CCAAATTGGA GGTGTATAAT TGCAAACATG
101301 GAATCCCTAT ATCTCTGTTA TGCAATCCCT GTATCTCTGT ATCCATGTTA
101351 AATTGAAGT ATGCTTTTTT GAAGTAAAAT GGTAAGAACA GTGGCAACAT
101401 CTAGTCTTCA GAGCATAGTT TAAGATTTTT GOCOAATCCT CCAACCCATG
101451 CAATGGTGTG CTTTGAAAAAC CACAGGTTTC TTTTAGACAA ATACAACATT
101501 TATTTCCCGC ATTTCTTTTT GATTTAACAT TTTAGTTAAC ATTTTATTA
101551 ACATTTTAGT CTACAAGATG CTTCCACATT ATCTCTCATT GGAGTCTCAG
101601 GACCACTGTG TGAATGGGC AATATCAGGG CTCTATCTA GCAAGAAAAG
101651 AACCAGATTT GGGGTGGCGA AACAACCTGC TCAGGGTTGC AAGGATGGTA
101701 CATGGTGCAG CCAGGGCTTG AGCTTGGGTC TTCTTAAAAG TGTGGCTTTT
101751 AAATAAAATA CTTAAGTGCC TGCCAAAAAA GTATAACATT AACTTAGGAC
101801 CTGAAAGGCA TTGTACAGAT CAGGTAGTTG CACTCCTCCC CCTGCCCTAC
101851 AAAAAAGAA AGGTAAAGGA ACGAAGGCAT GGAATAGTTA AGTTGCTTGC
101901 CAAAAGCCAC AGTTATAAAA GTAGCAGAAC TGGGTGTAAT ACCCAAGAAC
101951 ATCCATGGAA AATAAATGGA AGCTTATTAC AGCCAGCCT GTAAATATGT

FIGURE 3-30

102001 ACATAGAAAC AGAATGTGTA TGTAGAAACA AAATTATTAG AGGAGTGAAA
102051 TTAGTTTCTG TCCTAACCCCT GGTCAACTCA TAGGGTTCAT TTCCCAATCA
102101 GGAGGTTGCT TTGCCATTTT GACATGATCC ATTTTCTCAG AGTTGCCAAG
102151 AGCAATTGCA ACTGGCTTTG TTGTCTTTCT TTCTATGGATC TATTTTGGAGC
102201 TCAGGGACAA GGTTGTATG CGGCAGATTG TCCTTGACAA TGCAAGGCTC
102251 ACAGTAGTAG CCTTATAAAC CAAAGTTCAC TGTACACTGG GCCAGGAATG
102301 GGCTGCTGAA GGTGACCTCT CCTTCATGTT GGTTGGTTTA TCTTTGTTGG
102351 TTGGTTGTGT TTATCTCTGT TCACTATAAG GTTCTGACAG AAGCAAAGTC
102401 TTGGTCCCGG TTACATGTCC CCAGCCTGGT GGATGATGGT TACAGAGTGC
102451 TGGAAACTTT TTTATTTATT TAAATGGAG TTACGTAAC GAAGAGTTGC
102501 CCTATCTCAG TCAGCACTGC AACCAATTAA AATAGAAAGG CTTAAATAT
102551 TAATTTTGTG TTTAGCCTAG AGTCTTAAAT ACTAGGGTTT AAAAGTTTCA
102601 TTTACTTTCT CTCTCCCTCT CTCCCTCTCT CCTCTCTCC CTCCCTCTCT
102651 TCTTTCTTCC CTCCCTCCCT TCTTTCTTTT TTCTTTTTC TTAAGTATGC
102701 AGAATGCTTT GCTACTTTGC AGAATGCTTT GCTACTTTGC AAAATAAGA
102751 GTAATCATT TTCTTTTCT TCAAGACTTT CAAATTTAAG TAATTTTGT
102801 TTTCTATTTT TCATTCAAAA ATAGGGTTAT AACATTTCTT TGACACAAGG
102851 ATATATATAT ATATTTAGAG ACAGGGTCTT GCTATGTTGC TTAGGCTGGC
102901 CTTGAACCTC TGGTGTCAAG TGATCCTCCT GTCTCAGCCT TCCCAAGTGC
102951 TGGGATCACA GGCATGAGCC ACTGTACTCA GCCTTTATTA ATCTAAATAT
103001 GATAATTTAC CCACCTGAGT TCATTTGTGC TGATTAAAT TACTCTCAAT
103051 CCCTATATGT ATTTCTTGTA TTTTGTGTTG TGTATGTGG CCTGGAATG
103101 TTTCTTTTAT TCATTCATTC ATTCCCTTCG CAATTAACCT CCAAAAAGGC
103151 TATGAAGATA TTTATGCACA TATACATTTT ATGATTCAAC TCTCATGGTA
103201 ACCTTTTATA AGGAAGCAG TGCTAATAGT GGTTCCTCTA CTAATAGATA
103251 AGAACATTGA GGCTCAGAGA GGTTTAAAAG GTTTCCTTAA GGTTCACAG
103301 TTAAGTAACA GAGTTGCCAT TAGAATAGAT TTCCAGTTTA TTCTAATGGC
103351 AACCTTAATT ATTGTTGTTT GACTTGCTCT AATTTATAAT CAGTTAAACA
103401 GATTCAAGCA TTCAATTTGAG TATCTATTGT GTGCCATAGA CATTCTAGAT
103451 GTGGGGATAC AATGCTAAGA ACAGATACCT TCTCATACAC AGCTCAATAA
103501 ACAAGTAAAT TCATAAAGAA ACAAGTAGT TTTCAAATAG TGATATTTTC
103551 TTCAAAGGAA ACAAAATTGAG ATGGAAGGTG ATGGTAAGAG ATGGTAAGAG
103601 ACAACTTTGG CCAGTCAGGG ACAACCTCAT TGAAAAGCTG ATAGTAAGTA
103651 CATCTTTTGG GTAAAGGGTA GTATAAGGTA CTTTGAAGGT ACAAAAATAA
103701 GACAGCTTTC TATTGCCCTT GGGAGGCCTA TAACAGAATT TCTCAAGTCT
103751 CTAAGGCCAA TCAAGAGTTG GATTTTTTTA TCCAACCTAT TTTTAATTGA
103801 TGTATTATTA AAAATCTGCA TATCAAAAAT GAAAATGTCT TGCATACTTT
103851 GCTGTAGGAC CCAATCATTG TTTTCTCTTC ATATACTGCA TTAATCTGTT
103901 TTCACACTGC TAATAAAGAC TTACCTGAGA CCAGGTAATT TAGGAAGAAA
103951 AAGAGGTTTA ATGGACTTAA AGTTCCACAT GGCTGGGTAG GCTTCACAGT
104001 CATGGTGGAA GATGGAGGAG GATCAAAGGC ATGTCTTACA TGGTGGCAGG
104051 CAGGGGAGTA TGTGCAGGGG AACTGCCCTT TATAAAACCA TCAGATCACA
104101 TGAGACTTAT TCCTGTCTAC GAGAATAGCA CAAGAAAAAC CTGTCCCAT
104151 GATTTAATTA CTTCCACCA GCTTGCTCCC ATGATATGTG GGGATTATGG
104201 GAGCTACAAT TCAAGATGAA ATTTGGGTAG GGAACACAGC CAAACCATAT
104251 CATTCTGCC CTGGCTCCTC CCAAATTTCA TGGCCTCACA TTTCAAACCT
104301 AATTATGCCT TCCTAATAGT CCTCAAAGT CTTAACTCAT TTCAGCATT
104351 ACTCAAAAGT CCACAGTCCA AAGTCTCATC TGAGACAAGG CAAGTCCCT
104401 CTGCCCTATG ATCTGTGAAA TCGAAAGCAA GTTAGTTACT TCCTAGATAC
104451 AATAGGGGTA CATGCATTGG GTAAATACAC CCATTCCAAA TGGGAGACAT
104501 TGGCCAAAAT AAAGGGGCTA CAGGCCCCAT GCAAGTCTGA AATCCAATAG
104551 GGCAGTCATT AAACCTTAAA GTTCCAAAAC GATCTTCTTT GATTCCATGT
104601 CTCACATTCA GGCACATTG ATGTAAGAGG TGTCTCCCA TGGCCTTGGG
104651 AAGCTCTGCC CCTGTGGCTT TGCAGGGTAC AACCCCTCTT CTGGCTGCTT
104701 TCATGGGCTG GCATTGAGTG TCTGCAGGTT TTCCAGATGC ACAGTGTAGG
104751 CTGTCAAGTG ATCTACCAT CTGGGGTCTG GAGGACGGTA GCCCTCTCT
104801 CATAGCTCCA TAGGCACTG CCCCACTGGG GACTCTGTGT AGGGGCTCCA
104851 GTCCCACTAT TCCTTCCAC ACTGCCCTAG CAGAGGTTCT TCATGAGGTT
104901 CCTGCCCTG CAGCAAACCT CTGCCCTGAC ATCCAGGCAT TTCCATACAT
104951 CCTCTGAAAT CTAGGTGGAG GTTCCCAACC TCAATCTTGT ATTTCTGTGC
105001 ACCCGCAGAC TCAACACCAT GTGGAAGCTG CCAAGGCTTG GGGCTTGAC
105051 CCTCTGAAGC CATGGCCTGA GCTGTACCTT AGCCCTTTT AGCCATGGCT
105101 GGTGCAGCTA GGATACAGTA CACTAAGTCC CTAAGCTGCA CACAGCAGGG
105151 GGGCCACACA GCAGGGGAC TCTGGGCTG GGCATGAAA TCATTTTTC
105201 CTTCTGGGCC TCCAGGCTA TGATGGGAAG GGCTACGTTG AAGGTCTCTG
105251 ACATGCCTTG GGGACGTTT CACCATTTGTC TTGGCAATTA ACATTGAGCT
105301 TCTTGTCACT TATGCAAAAT CTGCAAAATG CTGCAGCTGG CTTGAACCTC
105351 TCCCCAGAAA ATGGGTTTTT CTTTTCTTC TTCTTTTTT ATTATTATAC

FIGURE 3-31

105401 TTTAAGTTAT GGAATACATG TGCAGAACGT GCAGGTTTGT TACATAGGCA
105451 TACATATGCC ATGGTAGTTT GCTGTATCCA TCAACCTGTC ATCTACATTA
105501 GGTATTTTCT CTAATGCTAT CCTCCTGTGA GCCCCGACT CCCCTGACCA
105551 GCCCTGGAAT GTGATGTTCC CCTCCCTGTG TCCATGTGTT CTGATTGTTT
105601 AATTCCTACT TATGAGTGAG AGCATGTGGT GTTTGGTTTT CTAATCCTGT
105651 TTTAGTTTCC TGAGAATGAT GGTTTCCAGC TTCATCCATG TCCCTGCAAA
105701 GGACATGAAC TCATCCTTTT TTATGGCTGC ATAGTATTCC ATGGTGTATA
105751 TGTGCCACTT TTTCTTTATC CAGTCTATCA TTGATGGGCA TTTGGGTTGG
105801 TTCCAAGTCT TTGCTATTGT GAATAGTGCT GCAATAAACA TATGTGTGCA
105851 TGTGTCCTTA TAATAGAAATG ATTTATAATC CTTTGGGTAT ATAACCAGTA
105901 ATGGGATTGC TGGGTCAAAT GGTATTTCTG GTTCAAGTTC CTTGAGGAAT
105951 TGCCACACTA TCTTCCACAA TGGTTGAAC T AATTTACACT CCCACCAACA
106001 GTGTAAAAGC GTTTTTATTT CTCCACATCC TCTCCAGCAT CTGTTGTTTC
106051 CTGACATTTT AATGATTGCC ATTCTAACTG GCGTGAGATA GTATCTCATT
106101 GTGGTTTTGA TTTGCAATTC TCTAATGACC AGTGATGATC TTTTTTTTFA
106151 TATATATTTG TTGGCTGCAA AAATGTCTTC TTTTGAAAAG TGTTCATATC
106201 CTTCACTTAC TTTTGTGATG GGTTGTTTGT TTTTTTCTTG TAAATTTGTT
106251 AAAGTTCTCT GTAGATTCTG GATATTAACC CTTTGTGAGA TGGATAGATT
106301 GCAAAAATTT TCTCCCATTC TGTAGGTTGC CTGTTCACTC TGATGGTAGT
106351 TCCTTTTGCT GTGCAGAAAGC GCTTTAGTTT AATTAGATCC AATTTGTCAA
106401 TTTTGGCTTT TGTTGCCATT GCTTTTGGTG TTGATGTCAT GAAGTCTTTG
106451 CCCATGCTTA TGTCTGAAT GGTATTGCCT AGGTTTCTT CTAAGGTTTT
106501 TATGGTTCTG TTGCATCGTC AGGCTGCAAA TTTTCCAAAC TTTTATGCTC
106551 TGCTTCTCT TGAACACTTT GCTGCTTAGA AATTTTTTCC ACCGGATACC
106601 CCAAAATCAT CTCTCAAGTT CAAAGTTCCA CAGATCTCTA GGGCAGGGAC
106651 AAAATGCCAC CAGTCTCTTT GTATAGCAAG TGTGACCTTT ACTCCAGTTC
106701 CCAACAAATT CCTCATCTCC ATCTGAGACC ACCTCAGAAG CCATTCAACA
106751 GGTCTCTAGG AAGTTCCAAA CTTTCTTACA TCTTCTTTC TTCTGAGCCC
106801 TCCAAGTCTC TAGGAAGTTT CAACTTTTCC CACATTTTCC TATCTTCTTC
106851 TGAGCCCTCC AGACTGTTCC AACCTCTGCC TGTACCCAG TTCCAAAGTT
106901 GCTTCCACAT TTTTGGGTAC CTTTACAGCA GCACCCCACT ACCCAGTACC
106951 AATTTACTGT ATTAGTCTGT TCTCATGCTG CTAATAAAGA CATACCCGAA
107001 ACTGGGCAAT TTATAAAGAA AAGAGGTTTA ATGGACTCAC AGTTCCATAT
107051 GGCTGGGGAG GCCTCACAAT CATGGTGGAA GGTGGAGGAG GAGCAAAACC
107101 ATGTCTTACA CGGCAGGAGG CAAGAGTGTG CATGCAGAGG AACTGCCCTT
107151 TATGAAACCA TCAGATCTCA TGAGACTTAT TCACTATCAT GAGAACAGCA
107201 CAGGAAAAAC CCACCCCAT GATTCAATTA AGTCCACCA GGTCCCTCCT
107251 AGGACACATG GGGATTATGG GAGTTACAAT TCAAGATGAG ATTTGGATGG
107301 GAACACAGCC AAGCCATATT ATATACTTTA TTAACACTT ATCTCTTCTA
107351 ATAATACACT TGTCTCATG TGGTTATTCT TCTTATTACC TTTTTTTTGA
107401 GATGAAGTCT CACTATGTTG CCTAGGCTAG TCTCAAACCTC CTGGGCATGA
107451 GCCATCCTCC CACATGGCCT CCCAAAGTGC TGGGATTACA GATGTGAGCC
107501 ATCACTCCTG GTCTCATGTG GTTATTACAG TGAATGATTA AGACACCTTC
107551 TCTCCTTCA CTTTGTCTCA CTTTCTCTCA GATTTTTTTC AATGATGTCT
107601 ATGCTTTTCT TGTTTTTTTC TAGCTTTTCT AACCTTGCA TTTATTTTCT
107651 TCAGATCTCA ACATCTGCTG CAATTTGACT GTTCAGGTTA GTGACAATTT
107701 GCCATTATAT CAGTTTGTG CCTTAGGCAG TATTCACCAG CATTTCTCTA
107751 CTTGAGATGA ATAAGGATCT TTATTTATCT GACCCTTGT TTACTCATTC
107801 ATGGGGACAT TTAATATTTA CAGAACCTT TCATCAAAAC AAGCCTGTTT
107851 TTTCTTTTCA AATATAATA TACTAGCATA GGAACCTGAC AGAAGAGGTA
107901 ATAATACAGA AGAAATCTAG AGAACTGATC ATGGAGAAAT AATTAAACTA
107951 AAACAAAGCT GCTGCTTATA GTAAGGTAGA CCAAGTTTGT CCTGTGTTCC
108001 AAATTATACT TAGCCAAAAA TAAATATTTA TAGATAATTG AATAGTAGTT
108051 TTTAGAAATG ATTCATGGAT TACTCAGGGG TGGAAATTAT CCCTGTAATG
108101 TAGGCCCCAA ACTTCTAAAA TATTTATAAT TTGTGAGGGA GAAATAAATC
108151 CACAAACATT TGAAATATC TAATTTTAAC TTAAATTGAA AAACAGCAGT
108201 AGTGTATTTT TGTTAGGCCC TTATATTGGG TAATATAGTC TATGTAAGTA
108251 TGGGAAAGGC TGGTGAAAC TGTGGATTTA TCTACAAAAT ACATTGGTAC
108301 ATTGGGGAGT TTTGTGTTGG AAGTGTCTA ACACCTCAGG AAATGCTAAG
108351 GAAGAAATGG GTAGGTAGA CTGAACACTC CACAAGGGTA GGGAGAGCGT
108401 CTTCTCTTCA TTGCTCTAGC CCCAGCACCT AGAATGTGCC TGGCACTCAA
108451 TCTTTTCTTT CCTTTTAA CTGATTTTCT GTTGAGTTTA TAGGCTAGCT
108501 GAGTTTATAG CTTGGTAGAG TACAAGTCT ACTAATTTCT CTACTCATGA
108551 CTACTTTACT TTCTAATAGC ACTTTATGTT CTTCAAGTGC TTTTTTCTT
108601 TGTTCTTCAA TGTATAATAA GGTGAGAACA GTTTATCTC CATCTGCGAG
108651 GGAGAAGAGT TAGTTAAGAG ACTTTCTCAG GTCACACACA TATAGTTAAT
108701 GACAAGGTGA GGTTTAAACC TTAATAATA GAAATAAAG TGATTTTATA
108751 ATTATCTAGA GTAGTTTCAA TGTGAAATAA CTAAAGGTA TGGAAATGGA

FIGURE 3-32

108801 TGCCAAGAAG TATAGTCAGT CTTGCTGGAG TAAAAAATG CCCAGTGCTT
108851 TGTGCTTCT CCCAGCTGCT GCTTCCAGAA GAACGGGGTG TCTGAGTGTG
108901 AACATCACCC AACAGTAGG TTAACAGATA TCCACGCCCC TCTTGACCCA
108951 CATACATATC AGTGGGATTT AGAATGCTGC CACATATTGA TGATTGAATT
109001 TATGAAGCAT ATAATATCCT CAATAATAAA CCAAGTGTC CTGTCCCAAC
109051 TTGTTATCTC TGCTTCTGTG AACACATGTT TTCTTTTATA TGCTCCTTAC
109101 TCCTCAGGTG CTCTCTCAGG GACTTTTCAG TTCCGTGACCT TGTCTTTTC
109151 AGCATTTTCT CAGAGGACAA TTCTTAGCTT CCTGTTGATT CCTCAAGCAT
109201 TAATTGCTTT TTTCTGCCAG ATATTTCTCT GCTAGGCTCT TGAGCCCTCA
109251 GAGCTGTTCT GAATTATGCA GTGGGAATTG CCCAGGATTA GGAATCACCT
109301 AATGTCCCCA CCACCCCGGC TTCCTTGTA GGCACCTCTC AACTCTGCAT
109351 CCCTTATACC TTCACAGCAA CCCTGTGTAC CCAAAGCAGT GTCATACTCG
109401 GTGCTCCTT TTCTCTCTG AAATAAAATT CCTAGATAAG AAGACCTCTA
109451 TATTCCAGGC CTGTCTTTG ATTTTAGGGA AAAAAAAGAA AACTACCTAT
109501 ATACATAATG TTTTAAAAA TCAGTAATGT CCCACTGTT ACAGAAAGGA
109551 GAAATAAAG AAGTAAGTTA ATGCCTGGGA TACGTGCTAC AACATGGATG
109601 AACCATGAGG ACATTACACC AAGTGAAATA CTCCAGGCAC AAAAGCAGCA
109651 ATACTGTATG GTTCCGCTTA GATGAGGTAC CCAGAGAAGT CACATTCTA
109701 AATACTGAAA GTTGTATCGT GGTTCCTCAAG GGGAGGGGGA AATGAGGAGT
109751 TATTTAATGG GCACAGAGTT TCAGCTTGAG AGGAGGTGGT GACAGTTGTA
109801 CAACAATGTA AATGTACTTA ATATAGTACA CTAAAAATGG TTAATAATGGC
109851 AAATTTTATG AAATAGGAAT TTATCAGCAT AAAAAATTAA AAAGTAAGAA
109901 AAGTTACTGC TTGGGCGAAA GTATATCAAA AAAATAAAAA TAGTCCCCAC
109951 AAATTTCCAA AACAACCTTA ATGAGGTGTT GCTGCCTAAA TGGTGAACCA
110001 AATTGTGAAC CAATGTGTAG TGTTTGAGAC TGGGAAACTG ATGCCCAAGA
110051 TTTTAGCCTC AATAAGGAGT AGAGTTCTA ATTTGACTCC AAAGACATTT
110101 CTTTCCCTAC CATGCCAAGG CCATCTGATT CCCAGTCCAA AGAAGTTTTC
110151 TCTCTGCTCT GTAGGCTGOC TTAATCCAGA GTACACAAGC CTTCCATTTT
110201 CTTATCTGTC CTCTACCAG GGTGTGGTCC TTTTCTCTCT GAACACTGAC
110251 TGTATAATTA CCAGACAAAA CTAACATAT TAAAAATATA GGCAGTCTC
110301 TACATCCAAG GTTCCACATC CTTGGATTCA ACCAACCATG GATTGAAAT
110351 ATTTGGGGGA AAAAAAACA ATAAAAAAC ACTGGCTGG GCAGCATAGT
110401 GAGATGCCAT CTCTACAAAA ACATTAAAAAT ATTAGCTGAG CATTCCAGCA
110451 CTTTGGGAGG CTGAGGCAGG CAGATCACCT GAGGTCAGGA GTTCGAGACC
110501 AGACTGGCCA ACATGGCGAA ACCCTGTCTG TACTAAAAAT ACAAAAATTTA
110551 GCCAGGCATG ATGGCAGCTG CCTATAGTCC CAGCTACTCA GGAGGCTGAG
110601 GCAGGGAAAA TTTCTTGAAC CCGTGAAGCA GAGGTTGCAG TTAGCCAAAG
110651 TCCCACCACT GCACTGCAGC CTGGGTGACA GAGTGAAACT CTGTCTCAAA
110701 AAAAAAATAA TAAAAATAA TAAAAATTAG CTGAGCATAG TGGCATGTGC
110751 CCATGTCTCC AGCTACTTAG GGGGTTGAGG TGGCAGTGAG CTGTGATGCT
110801 GCACTGTCAC TCCAGCTAG GCAACAGCGA GACCCCATCT CAAAAAATAA
110851 ACAATAAAC AGAACACAGA TTAATAACAA AATACAGGCT GGGCTCACTG
110901 GCTTATGCTT GTAATCCAG AACTTTGAGA GGCCAAGGTG GGAGGATTGC
110951 TTGTGCTCAG GAGTTTTAGA TCAGCTGGG TAACACGGCA AGACCCATC
111001 TCTACAAACA ACAACAACAG GAGACTATAC TTTCAGGGAC CATTCTCTGG
111051 GATCATAGTT TGTACTAGA GAAGTTTCTC TGTGTAGAGC ATTGAAATAT
111101 AAAAAATGCA AATAATCATT TACATAGCAT TTACATTGTA TTGGTTATTA
111151 TAAGTAATCT AGAGATTAAT TAAGTATAC AGGAGGATAT ACATAGGTTA
111201 CATGCAAAATA CTACACCAT TATATAGGG GACTTGATCA TCCATAGATA
111251 CGGGTATCTG AGGAGGTGTT GGGTTCACTT CTCCACGGAT ACCAAGAGAC
111301 TAATGTTAAT TTCATTTCCC CAACCTCCAC ACCAGAACTC TGAAATAAGA
111351 ATAAGAAAAA GAGCAGTTGG GATAGACAAT ATCAGAAGTA TGTGGAAATG
111401 ATAACAGTGG AAGGAAAGCT GATCTAGGCC TACTCAACAA ATTTTAATCT
111451 TCATTCTGGT AAAAAACAAT TAGATTTATG GGTGCAAAAT TGAGCCAGCA
111501 ATTAGATGGC TCTTAGGATT AATAAAAAA GACTGAACAT CATGCCCTCC
111551 AAAGACTGAG GGAAGAGAT AGATAGGAGA CTTTGGCAAA GTAGCACTTT
111601 AGCCAACATC ATTAGCTTAA ATCTTAGTGA AGAGAGGTTA GAAGAAAGGT
111651 AGAATTTTCA TGAAGGATC CATTTTCTT CACTTCAGAA TTAAAGGAAA
111701 AATTAGGAAG CTGAATAAGA ACTAATGGCC TAATTTCTTT GTTCTTTTCA
111751 AAAATCAAAT CTTAAGTTA AAATTTCAAT AACCAACAGA AGAAGGTAGA
111801 ACCAATTTTG TGAATTTACA AAATACTTGC TTATTGACAC TATTGCCAAG
111851 GTCATTAAT AAGTTATCAA GTTACCTCAG ATCCAGTGA TTTAAATAT
111901 GCTTTCTGAA TGTATCTTT TCTGTTTTAA GAAGAAGCTG TATTAGGTTT
111951 TTGTGTTCTT ATAAAGAAAT ACCTGAGGCC GGATGATTTA TAAAGAAAAG
112001 AGGTTTAATT GGTCTACGAT TCTGCAGGCT GTATAGGAAG CATGGCCCA
112051 GCATCTGCTC AGTTTTCTGG TGAGGTCTCG GGGAGCTTTT ACTCATGGCG
112101 AAAGCAGAGT GGAAGCAGCA GGTCACTTGA TGAAATTGAG AGCAAGAGTA
112151 TGGGTGGGGA GCTGCCATAC TCTTAACCCA ATCTCTAGTG AACACAAGCA

FIGURE 3-33

112201	ATAACTCACT	TATCACCAAG	GGAATGGTGC	TAAGCCACTT	GTGATGGATC
112251	CACCTCCAAA	ATCCAGTCAC	CTCCCACCAG	GTCCCACCTC	CAACATTGGG
112301	AATCACATTT	CAACATGAGA	TATGGAAGGG	ACAAACATTG	AAACCATATC
112351	AGAAGCCTAT	CTTAGGCTGG	GCACGGTGGC	TCACGCCTGT	AATCCGAGCA
112401	CTTTGAGAGG	CCGAGGCAGG	CAGATCATT	GAGGTCAGGA	GTTTGAGACC
112451	AGCAAGGGCA	ACATGGTGAA	ACCCCATCTC	TACTAAAAAT	ACAAAAACTA
112501	GCTGGGCATG	GTGGCACACA	CCTGTAATCT	CAGCTACTCG	GGAGGCTGAG
112551	GCAGGAAGCT	CTCTTGAAAC	CGTGGGCAGA	GGTTGCAGTG	AACTGAGATT
112601	CTGCCACTGC	ACTCCAGTCT	GGGCAACCGA	GTGAGGCTCT	GTCTAAAAAA
112651	AAGAGAAGCC	TATATTAAAC	TTATAAAATT	TAATATCATT	TCAACTAGCC
112701	TTTTGTGGG	TGCATTTGTT	CACTTTGAC	TATTTTCCA	AATTCATGTA
112751	CAGTCGTGCA	TCTCTTAACA	ATGAGGATAT	GTTCTGAGAA	ATGCATCCTT
112801	AGGCAATGTC	ATTGTTGTGC	AAACATCATA	GAGTGTACTT	AGACAACCCCT
112851	ACATGGTGTA	GTCACATACAT	ACCTAGGCTA	TATGGCATAG	GTAGAGCCTA
112901	TTGCTCCTAG	GCTACAAACC	TGTACAGCAT	GTTACTGCAC	TGAATGCTGT
112951	AGGCAGTTGT	AACACATGGT	ATTTGTGTAT	CTAAACATGG	AAAAGGTACA
113001	GTGAAAGTAC	AGGATTATAA	TCTTATGGAA	TCGCTGTTAT	ATATGTGGCT
113051	CATCTTTGAC	CAGAAATGTT	ATTATGTAGC	ACATGACTGT	AATTCACATA
113101	TTGATTAGAG	ACTCCATAAC	CCACACCTAC	CTGTTCAATT	GCATGCACAT
113151	TTAGCCGATA	GGTGACTTTA	TCACTAGATC	AGTCCAAGAA	TAAGTTTAAA
113201	GAGCATGTCC	CCTTTTCTTG	TTTTTTAATA	AATGTAAAAAC	ATGGAAGTAC
113251	ATGATACCTC	AAAGGAGCAT	GAATCACAAA	CAGGAGTCCA	CATTTACAGA
113301	GCCTTTGCAA	CCACTTTTAT	ATCTTCAAAG	TGCTCTACCA	AAGTATCGGA
113351	GTCAGTCAGT	CATGCAGGTA	GGCTGCCAAC	CATGGCTGAG	CCCTCAGGAG
113401	CTGTCTTGAT	GACACAGATA	GACACGGTCT	GTTGTGTTCA	TTCAAACCTTG
113451	CCAGGAACCA	AGGATCTGAG	AATGGTAAGT	CTGGTGTGCC	AAGAATGAAA
113501	CTCCAAGAAA	GAAACTTCAG	AATCAAATTT	AAATTTAGGC	TGGGTGTGGG
113551	GGCTCATGCC	AGTAGTCCCA	GCGCTTTGGG	AGGCTGAGGT	GGGCAGATCA
113601	CCTGAGGTCA	GGAGTTTGAG	ACCAGCCTGG	GCAACATGGT	AAAACTCTGT
113651	CTCTGCTAAA	AACACAAAAT	TAGCTGGGCA	TGGTGGTGGG	CACCTGTAAT
113701	CCCAGCTACT	TGGGAGGCTG	ACGCAGGAGA	ATTGCTTGAA	TCCGGGAGGT
113751	GGAGGTGGCA	GTGAGCCGAG	ATCACACCAT	TGCATTCCAG	CCTGGGTGAC
113801	AAGACCAAAA	TGCCATCTCA	AAAAAAAAAA	AAAATCGAAT	GTAGGTGGAA
113851	TTAATAAAAA	TTTAAATAAA	CTAACAGATT	AAACCTTTCA	TTGTTACAGGA
113901	AGGAACAGAA	CAATTTTGA	TAACTTGTGA	AATATCTGGC	ACAGAAATTA
113951	TTTAGAGCCA	CTAAATAATT	TCAAATTACC	TAAAAATGCT	AGTGATTTAT
114001	TTTCTATTTT	AAGATGAAGT	CTACTTTAAA	CTTCTAAAAT	GCAGGGTTAT
114051	TTAAACTGGC	ATCTAAATCC	AAGCTGGTTT	TGGTTGGTAA	TTCTCTAGG
114101	ACATTTTACT	AAATCTTGAT	CTTATCTAAA	TGATGCTATG	TCATAGATGG
114151	ACTGTTTGT	TTGTTTGTA	TCCAGGGAAA	TTAAAAAAA	AAAAAAACAA
114201	GTAGAAATAA	AGGCTTTTAA	AGAATTTTTA	GAGTTAGAAA	TGTTTTCAAA
114251	ATTAGGTTCT	TFAAACCAAT	AGCCATCTCT	TCCTTCTGAA	CTCTTCTTTT
114301	TTCTGCCCTT	TGGTAGCTAT	GAAATAATCT	GCATTCCAGA	AACTTCTTTT
114351	TTCCAGTCC	TTTTTCATGT	CTTAACAGTG	CCATGCATGA	TTATCTACAC
114401	CATGGAAACC	CATCTTAATG	AAATGGAAAG	ATCTGCTGTT	TAAAAAAACA
114451	AACAACCAAT	CACCCATGCC	TCCTACAGTC	CTGTTAGGCC	AAAGGTCTGC
114501	TCTCCACCTG	GTCAGCTGCT	GAGGAGGGGG	CAGGTACCTG	TACCACAGTT
114551	TAGCCACAAC	AGAAATATCG	TTGGGCTACC	AAAAGATGTC	AGTCCCTAAA
114601	AATGTTGGCA	AGCAAAGAAA	TTTTTCTCTA	AGCACATCTT	AGAGATACTT
114651	TAGTCTAAAG	GCACAGTTGA	TCAGATTAAA	GAAGCTAAGA	TTACATTTTG
114701	GGGCTGGTCT	AATCGATAAA	TATCTATCAG	TGGCCATAAA	GTTTTATTTC
114751	AGTGTTTTCT	GGTGTAAGG	GATTAATTTT	ATGTACTCAA	GTCTATGGAG
114801	TTTGTTTTCT	TCCACCTTTA	ATCACCTCAC	TGGGCTTGCT	GGTGTGCAGT
114851	GCTCATGCAA	AACTTCTTAA	GGGAGTGCCC	CACTTGTTTT	AATTTACTTC
114901	CTCTAGCAAA	AACACAGCTA	GAGGAAACAC	AAATCGTTTA	AAAAAGAAAG
114951	AAAAAAACAA	AATAAACTGT	CTCATTTTCT	TCAGAAGATT	TCTGTTTATC
115001	CTACTTTTAA	GTCAAAGGGT	AGTGTTAAGT	TTTGATTTGC	AACAAACTCA
115051	GATTATCCAT	TAAACCAAGC	TTGCAGGCTT	TCTACTCCCT	TTTCTAGATG
115101	CGTCTATTTT	TTTAAAGGGC	CCAGGCTTTT	TGAGTTTACC	TTTCAAAAAA
115151	GTATGTTTAG	GCAGAATCGT	CTTCTAGAGT	TATGGAATAG	CTTTTCAAAT
115201	TTGGGATGGA	TATTTTCTTA	GAATTACTCC	AAAATGCAGT	AAATGAGAAG
115251	CAACAGCTG	AAGCTGCCAG	TCTCTGGTAT	GAATAGCAGT	GAGTAAAAGT
115301	GCTTTGAACT	TAGTGTCCGT	ATTGGAAAGC	AGGAAGTTGA	AAGAATCAGT
115351	TTGAATTCCA	TAATTGCTGT	AAATATTATG	TAGCATTTAT	TATCCCATTT
115401	TTTGATGTAC	CATGTAAATG	TAAAACATAC	AGGTCCCTCT	CCTCCCTGTA
115451	AGAGTTTATT	CTCCTAGACA	TAAAATGAGT	GTACATGCCT	AGCCATTGTC
115501	CACCCCTTTC	GAGTTCGATG	ATGTGTATCT	GATGAGGAAG	GACAGAGATG
115551	AGAGAATCAA	AATCATTATA	AACGAATACA	GATGATGACT	GGGTGACTGA

FIGURE 3-34

115601 AATCTTATCT CCCAAAGAGC ATAGTTAACT GCAGCAGCAG TGGATGATAA
115651 CTACTGGGTG GGGGTAGAGG GGTGTGTTTG CTCAGTTCTG CCTAGAAGAC
115701 AGTTGTAGTT ATTTTAGTCC CACAGTCTCT ACTCCTCCCT GGGCCTGTTT
115751 TTGCCCTGCT TTCCCTGGCT CTGTATACGG CCTTTGTAG CACTTTGTAG
115801 TTGTCACTCA GCTGTACTC CAAGTCTCT GTCAAGAAATA AAGTTACTTT
115851 TGTGTTGAAGA GTCTCCAGTA ATCCCCCTTC TTTTAACT ATGACTCCCC
115901 AAAGATATAT AGTCTAACTT GTGTGCACCA GTATTTTATC ATATTTATTT
115951 AATAAAATTC ATAAACCTTA CATAAAAGAT ATTAACAAA AAGTACTCAC
116001 CCCCTAAAA GGAGGAAGAT AATGACCATC AAGGCATGCG CAAATTACAC
116051 AGTCTTAGGA AACAGTACAG TAGGTAATTA TTGGACCTTT TTGATTAATG
116101 GCATCCTTGC TTTGCAGGTG TGTACCACCA CTGCACCTCA CAGGTTTCTG
116151 TAAATAAAGT GATTGGGGT TCCCTTCTGT TGAGCATTCT TCTATCGTGA
116201 AACCATTTGG TGATGAGAAG CTTGAGTTTC TAATGCATGT TCGTTGGCTT
116251 TATTGGAGCT GCTTTTGTAC TGTGGCCACC CATTTAAGTT CCTCTGTGGT
116301 TGATATATGA GAGCTAGAGG ACTCTGCCTT AGCTTCTTCA TCAGAACACC
116351 ATGTGATGTC TCCAAATGTC TTACACTGTG GCTCCCTGT AAGAGAGGTG
116401 GAGAGGAGAG AGGCCAAGGC TGAGGCCATT CCAGTGAGAT GATCACTTTC
116451 TTAGGCTACT GCCTGAGACC TCTCAACAG GATCTGTCTG TGGGCTCTAG
116501 TGAGGGGAAA GTAACCGGCC TTCAGTTGCG TGGTCAGAAA CAGTTACCCA
116551 CGGCCGGGTG TGGTGGCTCA TGCTGTAAT TCCAGCACTT TGGGAGGTCA
116601 AGGGTGGAGG ATTGCTTAAG CCCAGCAGTT TGAGACCAGC CTGGGCAACA
116651 TAACAGGACC ATGTCACTAC AAAAATGATT TAAAAATTAG CTGGATGTGG
116701 TGGCATGTAC CTGTGTTCC AGGTACTCGG GAGGCTGAGG TAGGAGGATT
116751 GTTTAAGCCC AGGAGGTGGA GGCTGCAGTG AGCTGTGATT GCGCCAGTGC
116801 ACTCAAGCCT GGGCAACAGA GTGAACTCT GTCTCAAGAA GAAAAAATGT
116851 TTCAAGGCACA TCTAGTGTG AAGATGTCAA TTAGCAAGGT TTTTAAATC
116901 CCTGGAAGT GTGCAACCCA GGATTAAACA GATGTTTAA AACATAAATA
116951 AAAGATGAAT TCCTGGCCGA GCGCGGTGCG TCACACCTGT AATCCAGCA
117001 CCTTGGGAGG CTGAGGCAAG TGGATCATGA GGTCAAGAGT TCGAGACCAG
117051 CCTGACCAAC ATGGTGAAAC CCGTCTCTA CTAAGATAC AAAAAAAGC
117101 CGGGCGTGGT GCGGGCACCT TGTAATTCCA GCTACTCAGG AGGCTGAGGC
117151 AGGGGAATTG CTTGAACCCG GGAGGCGGAG GTTGCAGTGA GCTGAGATCA
117201 TGCCACTGCA CTCCAGCCTG GGTGACAGAG TGAGACTCCA TCAAAAAAAA
117251 AAAAAAAATC AGATGAATTC CTGACACTTA ATACATTTAG ATAAAGTCTA
117301 ACTTATCTTT AAAGTTAACT TTAACAACCT GCTCTACAGC ATAATATTAT
117351 CCTCTGTGTA GACAGTGACC TCTAGTATAA GCTTTAAATT GGTTTAAAAA
117401 ATAGATTAAG TATGAAAAACA TCTCTTCAAC ATTTTCATAT CTCTACAACT
117451 CTTTATTAGA AATATCCATT TTGTCTATA TTCATTTCT GCTGAACTAA
117501 AGTGATGACC AGTCTCCAGA GGATGACAGA TGGGCAGAAA TTTATAAAAC
117551 AGCAGCAGTC ATGGACAGCC TAGGCCACAA GTAGAACATA CCAGACCTCC
117601 TGGGTACTAC TGTCTCAGTG AGAAAGGATC CAGAGATCCA GCATCACCAG
117651 ATTCCTCAC ATACTGACCA AAGAACTTT TTTAGTTTGC AGATTTTGGT
117701 GGGATAGGG AGGAGTATTA GAAGCTGAAG TTCTTGCTTT ATTTAAATAA
117751 TCATGGCAGT AACAAAAATC GGTAAATAAA TGCCCTTCT AGGCCAGGCG
117801 TGGTGGCTCA TGCACTTTAG GAAGCCGAAG CAGGCAGATC ACTTGAGGTC
117851 AGGAGTTTGG AGACCACTCT GGCCAATTG GTGAACTTC ATCTCTACTA
117901 AAAATACAAA AATTAGCTGG GCGTGGTGGT GCACACCTGT AATCCAGCC
117951 ACTCTGGAGG CTGAGGGAGG AGAATCGCTT GAACCAGGTA GGTGGAGGTT
118001 GCAGTGAGCT GAGATCACAC CACTGCACTC CAGCCTGGGC GACAGCGAAA
118051 CCCCATCTCA AATAAATAAA TAAATAAATA AATAAATAAA TAAATAAATG
118101 CCCCTTCTAG TTGAAAAACT AAGTTCTCTAC CTAAGCATAA TTTGGATTTA
118151 CCCAATTTAT CTCTTTTCAA AATACCTCAA ACATTTCAAC TTATTATTCT
118201 TTTTAAGGAT TACAAAGTAG AGCAGGGGGG AAATAATAAA CCACTAATAA
118251 AGAATAATAG CCATTTGACA GACAGGTGTT CTTAGTTTCA TAAAAAATAA
118301 GATGCCTGGT AGATTCAATC TTTTATGAAT ACTAAGAAT GCCTCTTATT
118351 TTTGTTTGTG GGAGACAGGT TCATTTTGAA CCTAACCTGG TGTCTCAGG
118401 GAACATAGGT TAGAGGGGAG AGATTTAGGA GTGAGGGCTC AAGCAAGAAG
118451 CATGTTAGAA GACTGCTGTA GTGGTCCCGG TGAGGAGTGA AAGGAATGGA
118501 ACTAAAATAC CATGAGGAAC GTGGGCCAAA GGAAACAAGT CTGAGAGATT
118551 TAGAAAGTAA ATCATCAGGA TTCAGTGGTG ACTCTTGGAT TTGAAGAGGG
118601 AAAGGAATA ATCTAGGGTA GCTGTCACTT TCTGCCATGG GTAGTTGGGC
118651 TAACAGTAGT GTATTAACCT AAATGGGGGG CAGGCAATTT GTGAGGGTGA
118701 GTTGAGTTCA GCACAGGGCC TGTGACTTT GAGGTGCTT TGAAACAGGA
118751 GTGGATATGT CTAATTTTAC ATGAAGTGTC TACTTAAGAG AATGTGTAGA
118801 GACATTAACA GGCTTGGGTA GGAACACGGA ATACCTCAGG TGCCAAATGA
118851 AAACCTTTTG CAATAACAAG AAGTTAGGAA GTTGAAGAGG GTAGAAGAGG
118901 CAGCAGAAAT GTAGATGGAT AAGAACATGT TGGCATGTTT AAGTGACATT
118951 GTGAATAAAC CTGTCTACT GGGCCAGATG GGATTAGGGC TGAGATCAAA

FIGURE 3-35

119001 GCAGGCCTAA TGCAGTTTGC AGACGTGTTT TGTTAGACTT TTGTAGAGCT
119051 GGATCACACA GTGTCTAAAA TTTAAATTAG GTGCCAACAT TTCCACACAA
119101 AATCOGGATT TCTGACTTTT CTTTTAAACT AAAGGGCTCC TAGAGGTAGA
119151 TTTGGCAACA TTGTAGACC TATATGATAA TAATCGACTG AAGTATATGT
119201 CCTTCTCTC CAATGAACCT GTTTTACTTA TGTATTTCG CTGAGCCCTT
119251 AGACATTAA ATTTTGTACT TTTTTTTTTT AATCCAGGCT TATAAGTCAG
119301 ATGAATTTTC TACTTCTGAG TCAAAGATCA GTAGGTAATA AAGGTACAAA
119351 GATAGATTAG CAACAGATTA CGGAGAGCTT TGAATACCAA TCTAAGGAGT
119401 GTAAATGTAG GCAGTGGGCC ACCTTTGAAT AAGGAATTGA TGAGATTAAA
119451 GCCATATTTA GGAGGATTAT TCTGGACCCG TATGAAAACA CAGAAGTTAG
119501 GGAAAAACAGT TAATAGTTTT GAAAGAGAAG AGAAAAAGGA GATGGTGTG
119551 GGATACATAA TTGGGCTTTT AAAATGCAAA ATGAGAAGTG TTTTAAAGAG
119601 ATATCACCCA GAAAGTCTAT GCACTGCCAC ATGGGCACTA TATGGGTGGT
119651 TGTATTTGGT GGGAAATTG CTTGCAGACT TCCAGAACTC AGACCAATGT
119701 GTGGTGTGGG GGACGGTGAT TGTGAGGCAT TATGGAAAGG TCAAAACAAA
119751 TATGCTCACT GGCTATCTAT GGCCACAGG TCACTGTAGT CTCTGTATA
119801 AGTACACTAA GTGGAGGAGA AAGGTCCTTT AAAAAAAGA AAGCTAAAT
119851 TAATACCTGA TTGTATTAA CTGTGTGCCA AACACTGTTT TAAGCTCTTT
119901 ACACAGACAT TTTATTTAAT CCTCGCAACC AATTTCTGAA GTAGGTACTT
119951 TTCCAATTTT CATTTTACAG ACAAGAAAAC TGAAACCCTA GAGGTTAAGA
120001 AGTTATCCAA AGCCACAAGG CTGATAAGAA CAGAACCAGG ACTTGAACGC
120051 AAGCAGTCTG CCTCTCCAGA GGTATTCTTT TTAAGTCTA TGTAAACTG
120101 CCCCTGCATT TTAATCTGTT CTAATGCTAC ACAGATAGGC AACTTTACAG
120151 GTAGAGGACC TTATGCTTTA TTCTGGATGC TCTGTTATAA CTGTTTCAG
120201 GGGTGTCAAT TTGGTCCAGG TCCTCTGGA AGAAATAAAA CTCAGAAAT
120251 GACCCTTGAA CTGTCTCTTA GGGAGCAGAT AATGTAAAGG GTCCTTGGT
120301 GACCTTGAGA GAACAGGTAT GTTCAAATGT CTGTCTCTT CCTTTAGCTA
120351 ATGGATCAGT GTAGCTTATA ATTGCATGCT TCTAACCTT TGTGAAAAA
120401 TAAAACTCT TATAAACATG CTTTTTTTTT TTTTGGAGA CGGAGTCTTG
120451 CTCTGTCCGC CAGGCTGGAG TGCAGTTGTG CAATCAGCTC ACTGCAACCT
120501 CTGCCCTCCG GGTTCAGCT ATTCTCTGC CTCAGCTCC CGAGTAGCTG
120551 GGATTACAGG CATGCGTCAC CACGCTGGC TAATTTTTAT ATTTTAGTA
120601 GAGATGAGGT TTCACCAAGT TGGCCAGGCT GGTCTCGAAC TCCTGGCCTC
120651 AGGTGATCCA CCCACCTCGA CCTCCAAAA TGCTGGGATT ACAGGGGTGA
120701 GCCACCATGC CCGCCCTTAA AAATGCTTTT AAAAAAGAA ACTAAAAACAT
120751 GTTAATTTTT TTCAAATGTT TTCAAGAAAA TTATCAGAG ACAAGTTTCA
120801 TAAATATTGA AATTGGAAGA AAGTTGCAAG CCTATAACAT TGCAGAGAAG
120851 CAAATGCATT TGATGCAAG CCTCAAATTT GTCAAGTTT TCTACCATAT
120901 TCAGTGTGGT TTCTTCTCT TTGGCTATA GATGAAACAT GTAAATGAAA
120951 GATTTCAAGA TGAAAAAAT AAAGAGGTG TTCTCATGTG CATTTGGCTC
121001 ACTTCAGGAG TTGGAAGACT GCTCTTTGGC CGGATTGCAG ATTATGTGCC
121051 TGGTGTGAAG AAGGTTTATC TACAGGTAAT TTTTACACC TTTTTCCTC
121101 TATCAAAAA TACTCTCATC ACCCAATGTC TCATTAAATG TACTTACATG
121151 CTTAAATTTT TTTTCTTCT TTCTTTTCT TTTTGTAGAT GGAGTTTCCG
121201 TCTTATTGCC CAGGCTGGAG TGCAATGGCA CGATCTCAGC TCTCCGCAAC
121251 CTCCACCTCC CCGGTTCAAG GGATTCTCT GCCTTAGCCT CCCAGGTAGC
121301 TGGGATTACA GCGGTGTGCC ACCACACCAG GCTAATTTTT GTATTTTTTT
121351 AGTAGAGATG GGGTTTCTCC ATGTTGGTCA GGCTGGTCTT GAACTCCTGA
121401 CCTCAGGTGA TCTGCCGCC TCGGCCCTCC AAAGTGGCTT AAATTTCTT
121451 ATAAAAATGA GAAATATTTT CTACAACATA ACTTCTATAG GCAGTTTTTC
121501 AAGGACAAAA TTAGTTATTA GTTTGGGTTT TAAACATGAG AAATTGGCAA
121551 TGAAACAACA ATTTCTTTGT TTTGTGCTGG AACTCCACCA AACCAGAAATG
121601 GTTTTCATCC ATTGCTTTTT CTATGAAGAA TGTTTTTTGG TGTAGTTCTC
121651 ATAGTCATGT GCAGATCCTG TGCCCTTTGC ATGTCTTATG AAATTTGGTT
121701 GTGTGTGTGA CTTTTAGCT TCTTTACTGC AAATTGCTC CTCGTGTTTT
121751 GGGGTGAGCA TAAACAAATG CTAATTCOA GATCATTGCT GACAATCAAC
121801 AGAACAGGTA TTGAAGTGAC TCCTTCATGC CACACACTCT GCTAAATGCT
121851 GAAGACTTAA GTGAAACATG GTCTGTGCC TCACCTAGTA GCTAATGGTC
121901 TCATGGGAGA AGATAAGCA GTGTGCGAGC ACAGTGAAT AACGGGTTTG
121951 CTAGATGAGT GCCATAGCAA CACAGGCACC ATGCATCTGA GTCAGTAGTG
122001 AAGGGCTGAG CAGAGTTAAG AGGTGAGGAC CAAGTGTGTA GATAAGGGAG
122051 ACAGAGAAGC ATGCTCCGAG CAGAGACAAA CACATGGGAA ACACCTCCA
122101 CACTGTGGAG GTGTGACATG GGATGTTATA TCTGGGAAAC AAATGTTTTGA
122151 ATGGAATAAA GGGAGAATAG TGGATGGATT GGTGGGGGG ATGGACAGGA
122201 AGCAGCTTGG GAAGGGCGGT TATGTACATG AGCTCTATCC TGCAATCTAC
122251 TAGGAGCTAT TAAAGGATTT TAAGCCAGAG AGTGACATAA ATTTGGGTGG
122301 CGGGGGTGG TGTTTTTGG TTTTTTGAGG CAAGGTGTCA CTCGGTTTCC
122351 CAGGCTGGAG TACAGTGGTG CCATCACAGC TCACTGCAGC CTCACATCC

FIGURE 3-36

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122401 CGGGCTCAAG CAATCCTCCC ACCTCAAACCT CCTGAGTAGA TGGGACTACA
122451 GGTGCGTGCC ACCATGCGCTG GCTAATTTTT GTTTTTTTGT TTTTTTCTG
122501 TAGTAACAGG GTTTGCGCTGT GTTGCCGAGG CTGGTCTCGA ACTCCTGGAC
122551 TCACAACGAT CACCCATTTT AGCCTCCCAA AGTGCTGGGT TTACAGGTGT
122601 GAGCCATGCC CAGCCTGAGT TGTGTTTTAT AAAGATCAAT TTCGGCTGTG
122651 CGTGGTGGCT CATGCCTGTA ATCCCAGCAC TTTGGGAGGC TGAGGCAGGT
122701 AGATCACCTG AGGCCAAGAG TTTGAGATTA GACATGGTGA AACCCCGTCT
122751 CTACTAAAAA TACAAAAATT ATCCAGGCAT GGTGGCACAT TCCTGTAATC
122801 CCAGCTACTC AGCAGGCTGA AGCAGGAGAA TCACCTGAAC CTGAGAGGCA
122851 GAGGTTACAG TGAGCTGAGA TTGTGCCACT GCACCTCCAG CTGGGTGACA
122901 GAGCAAGACT CCATCTCAGA GAAAAAATAA AAATCAATCT GGTAACCTGTG
122951 AAGAGTGGAA TGGAGTGGAG GAGGGGACAA GAGTTGAGAT AGTCACAAAA
123001 GGCCACATAC TGAATGATTG CATTTATATG AAGTGTCCAG AATAGGAATC
123051 TCTGTCTCTT TCCATAGAGA AAGAAGGTAG ATTTGTGGTT GTAGGGGCTA
123101 GGGAAAGGAG GGAATGGGGA GTAACTGCTA CTGTGTTTCT TTGTGGGGTA
123151 ATGAAAATGT TATAAAATTA GATAGTGATG AAACCTCACTG AATTGTGCAC
123201 TTTAAGTGGG TGAATTTTCA AGAATATGAA TTATATCTCA ATAAAGCTAT
123251 TTTTAAAAAG GCCAGGCATG GCAGCTCATG CCCATAATAT CAACACTTTA
123301 GGAGGCTGAA GCAGGAGGAT CACTTGAGGC CAGTTCGAGA CAATCCTGGA
123351 ACCATAGTGA GCCTCATCT CTACCAAAAA AAAAAAATTT TTTTAAGTTA
123401 GCCAGGCACG GTGGCAGATG CCTATAGTCT TAGCTATGCA GGAGGCTGAG
123451 GTGGGAGGAC TTTGAGCCTA GGACTTTGAG ATTACAGGGG AGTATGGTCA
123501 TGCCACTGTA CTCAGCCTA GGTGACAGAG TGACACCATG TCTCTAAAT
123551 TTAGAGAAAA AGAGTAGAGG TCCAGGACT AGTTGGAAAC TATATTAAG
123601 TAGTCTAGGC ATCTAGGCAG GAAGAACCAG GCAGAGATA CTGAGATCAA
123651 ATGGAATAAG CTAGGGACAT AGAGAATGAG AATTTGATGA AGCCACTTAG
123701 GCTGGATCTG AGATTTGTGG CTCAGGTAAT GGAGTAGATG ATTTTGCCAT
123751 CTTATCAAGA TCAATATGCA GTAGATCTAA GTATGATGAT GAATTGGGT
123801 TTTTTAAATT AAAAAAATTT TTTCACCCAA CCTACCTGCC CTGCCCCAG
123851 TGATGAGTTT GTTTTTGCCA TGTGTGTTGT GATGCTGTA GGAAAGCCAA
123901 GTAGTGTTTA GAGCTCATGG AAGAGTCTGG ATAAGAGGCC TGTGGGTAA
123951 GAGGCTGTG GGTAGGAAG CCTGTGGGTT TGGCATTAT GGGCTGCATG
124001 AAGTAAGTGG AGGACTAAGG AGATGGAAAG GGAGTGCCCA GATAGGCAGG
124051 GGGAAAAACG GGTAGAGAGT GTTTCTAGGG GCAGGAGTGG TCAGCAGTGT
124101 CAGTAGCTAG TGACAAAGAG GCTGAAAGGT TTTTATTGAA TTTAGAATAG
124151 GGAGGCTATG AGTGAGCTTA CAGAGAATGG TTTCTACAGG TGCAGAAAT
124201 TGATCATGAT CATTTGAACA AATGGAAATA TAGACAACCT TGTCCAAATG
124251 CTTGCTGTG AAGGCAAGC AAAGGCAAGC CACAAGGGGG GGTCTTAGGT
124301 TTTGAGGATT AAGCCTGTCT AATTATATTA TACATGAGAG GCAGTATTTG
124351 AGCAGGCTCT TGAAAAAGAG GTGAAATTTG GACACAGGAA AATGATTGGA
124401 AAAGGCATTA CAGATAAAGT TAACCTCCAT TAATTGACTT GAAGTAATAA
124451 CAGTCAACCA TTTATTGAGG ACTTTTCATGT GGCAGACAAT GAACTAAGGG
124501 CTCTACATGC ATTATCTCAT TGATCCTTGC CCCAGCCCTT TAAGAGAGAA
124551 GGTACCATTG TTATTTCAC TTAGAGATGT GAACACTGAG GAACTGAGAG
124601 GCTACCTCAC TGTGGGTGTC TGTGTGTATA GAGGTCCAGG CAGTCACAGG
124651 ACAGTCTGGT CACACAGCTA GAAGGAAGTG AAGAGAGTTG GTAATGTGCT
124701 GCTTTTAAAA ATGTATTTAT TGTATCATGA TCACTTTGTC AGTACTTCAC
124751 TGTGGACATC CTATCTAAC ATTTAGTTTT GTTCTCTAGT GTCAAGGGAG
124801 CCTCTAATG GACATTTATT GCACTACAGA CTTTCAGCTT TCATACATTC
124851 AAAAATTGAG TGCCTCCTGT GCCCCAAGCA CCAGCTCAGA TGCTGTTAGG
124901 GTGATGCAAA CAAGACAGAC ATGGTCCCTG AGTTCTTAAA GCAAGCCTGA
124951 GGCAGGAAGA AGCCGAATGT GTGTGGAAC CCAAGAAGAT GGGGAAAGTG
125001 GCATGGGAAG GGACTGGAAA GTTAGAGTGG GTCAGATTAG ACAGAGCCTT
125051 GAAAGCCAGG ATGAAGAGAC TTTGCTTTAA GAGTAGTGGT TTTTGGCCGG
125101 GCGCAGTGGT TCACGCTGT AACCACAGCA CTTTGAGAGG CCAAGGCTGG
125151 CGGATCACGA GGTCAAGGAG TCGAAACACA GTGAAACCCC ATCTCTACTA
125201 TAATTACAAA AAATTAGCCA GCCTTGGTGG CACCGCTCTG TAGTCCCAGC
125251 TACTGGGGAG GCTGAGGCAG GAGAGTGGCT TGAATCTGGG AGGCAGAGGT
125301 TGCACTGAGC CGAGATCGCA CTACTGCACT CCAGCTGGG TGACAGAGTG
125351 AGACTCCGTC TCAAAAAAAGT AAAAAAAGT AGTGGACCTT TGTGAGGGA
125401 CGTAGGCTG ATTTGTTTTT TAAAGTCACT GTGGTTGTTT TGTGTTTGA
125451 GGATGGATTA CAGGGAGGGA AACAAGAGTG CAAGAGGGGA GGAAGACCTG
125501 TTAGGAGATC AATTCAGGGT CCAGGTGAGA GATGATGGAC TATGGTGCTG
125551 TAATAGATAA AGTCATGATA TATTTTATAT ATCAGCATTT TATTCCAAAA
125601 CAATGTTTTG ACGTCTCTCT ACCCTAGATA GGGCAGACAG ATTATCTGCA
125651 ACATTTTTTG AGCACATTTT AATACCTGAC TGTTTCCAGT AATTTACAAA
125701 AGAAAAATATA GCCTTTCCTA ACTTGTCCCA TGTGTTGCTG CAGTTACACA
125751 GCAGTAAGTT AAAAGTTAGT ATTTGGGGTCA AAATATTTCA CTTTAGATGA

FIGURE 3-37

125801 AAGTTTAGGC ACAATCTGGC TTCTGTTAGG CCTTATCTAA TTTTTCATC
125851 CAAATGTAGA GCATCGTTTG TGGCACCCAG TAGCACATGC TGAGTCACAG
125901 GTGTGACAGC TGCATTTCAC ACAAGCCTGA GAAGGAGAAA GAAAGCCCTT
125951 CAGTGTGTCC TGTGGTTGCG AGGAGCCACT CACGGACTCC ACCTTGTGAA
126001 CACAGCGGCA CAGGACGCAA CACAGGCCA ACCCATGCAG GATGCTGGAC
126051 TCGTTCCCTT ATTCACACC TCCTCTCTCT CTTTTCAT GGCTTCCTTG
126101 CCCCAACATC CCAAAACACAC AGTGTGGTTT TTGATTCTTG GCTCTCTCT
126151 GCTGCAGTTG ACTCCAGCTC TGCTGTTTG TTCTTCCTT TTTCTCCATC
126201 CCTGCTCTC TGCTTTTGG CCCATCCTTT AAGGCTTGA ATGCTCCCTG
126251 GCTTACCTTC TTTCATTCA TTGGTGGTGT GTTTCCTCAG ACATACCTGC
126301 TCCTTGCTTT CATCTTTCAA CTCTTGCGG CTGTGACAAC TCTTCCCTCT
126351 TTGTCCCTG GAAGCAGTT CTGAGTAGCA GCCAGGCCTA GAACACTGGT
126401 GACACAGACA CACTTCATAG CCTCCCGCA TGGTCTAGTT TCAGATCATG
126451 GTAATCCCTA GTCTAGGAGG CTGCCGAGCC CAAGAGCACA GGCTCTGGAG
126501 TGAGAAGCCA GTTCACCCA GTTCTACCAC CAACTTGAGA ATCAGCAGAG
126551 GGTGTGGTG AGGATTCTTG TGCGCAGGTT ATGTAAAGTG CCTAGCCAG
126601 ACTGATGAT TAATAATCC TTGCATCTGT TATGTTTAA TATCTTATTA
126651 AATACTGAAA GCAGATCTG ATTTGGAATA GGTCTCAAGA AAGGAGACTA
126701 GGGTCTAATC CTGAATTAGA GTCTTTGCTT ATAGGTAAAC AAGAATTTAT
126751 GAATTTATCT CACATTTTGG CTTAAGAGTT CTGAATTTAA ACTTCCATCA
126801 AGGTCCCTGG TCCAGGTGT TTTCAACCTA ATAATTCTAA ATATTGAGTG
126851 GTTGGTTGCA GTAGCTTATG CCTATAATCC CAGCGCTTTG GGAGGCCAAG
126901 GCAGAAGGAT CCTTGACCC CAGGAATGCA AGACCAGCCT GGGCAACATA
126951 GTGAGACCTC ATCTCTACAA AAAATTAATA AGTTAGCTGG ACATGGTGGC
127001 CTACACCTGT AGTCCAGCT ACTTGGGAGA TTGAGATGGG AAGATTGCTT
127051 GAGCTGGGGA GGTGTAGGCT GCAGTGAGCT GTGATCATGC CACTGCATAC
127101 CAGTCTGGGT GGCAGAGTAA GACTTTGTCT CAAAAAATA AAAAAATAA
127151 AAAAAATGCT GAGTCAAGTC TACTGCTCCT GCCAGAAGAG ATGACTGAAG
127201 TGCATTACGT AGAATAATAA TGGTTAAAGA AAAGCTTTGC AAAAGTTCCC
127251 AGAATATATA CTTTATTGGG ACAGGAGAAG CTACGTGTGT CGTGGTATCT
127301 TTTTACTATT TTCTTAATCT TATAGGCCTG TGTTCCTAGT CACCATTAAA
127351 TTAACACAGA TTTGTGTTT TAATGTAATA TATAAGTGT TTGGAAGGGT
127401 GAGAATATTT CAAAGGTTTG AAAGTTAAAA CTGTGTATGA AAGAATTGAA
127451 AACTTGGAAT TTAGATCACT TTTCCATTGT GTCATATTC TCTGTGACAT
127501 AGGCAATATT AAGCATGGAC ATCATGTCCA TGACATAAAA GCAGACAACC
127551 CAGACAACAC ACACATGTGC ACAGGAACGC TCTGGAAGGA TGCAAACCGA
127601 ACTGTTAAGT GTTGATTCTT GAGGAGGTGA ATGGGCATGG GTTGAGAGTG
127651 AGAAGAGGTT GTAGGAAGAC TTTTCATATAT TACTGTGTAC ATTTCTCTAA
127701 GGTTTGAATT TTAATAATA TATTCATGAG TTACTTTTGT AATGTAGAAA
127751 TATTAATGCT TTTCTATCC ATCAGTCTGC CTAAGCTTCC TCTCCGGTT
127801 CAGGTAGAAT GAATTGGATC AGTGTGCTC CATTTTCCAT TTTAGCATT
127851 TACATTTGCC TAAAGATATC TTGGGATGAG GGTATATACT TTATCAAATG
127901 TAAGCTATTT CCAAAGTAGT AAATCCAAAT ACTTAACAAC TTCCAGCCT
127951 AAGTAAATGA TAGAGGCTC CGTACTCAGT CTCATCTAGA CTGTGGCACT
128001 GGGTGTGAAC GTATCAAATG CATGTTTCTC CATCAGGCAG AAGTGAGAGT
128051 AACCATGTGC CATGGAGAAG GTTGACAGAC TCCCTGTGAA GCACTTCGAA
128101 GTGACACTGG CCTCTGTGTG CTTGAGAAGA ATCCAGCCAC CTGCTGTGTG
128151 GCTGACATT TTCTTTAGT TTGTGATGGG CCAGCAGAAC TCTGTTGCCA
128201 ACTGTTTTCT GTCTGGGTG CCTAGCCAGA GGTCTGAAA GTCTGGAGAC
128251 TTTATATTGG CTAACCTTTA GGAAGGTCAA TTACATGTCT ATCTCCAAGA
128301 TGCTTCTTTT TATTCAGGTG CAGCTCATTG TTTCTCTTG AGCTACACTT
128351 AAGATTCTTG AGCAAAACCT AAACGACAT TTCTCCAGCA ATGCTCTCCT
128401 TGAGATAGAA ATGGGAAAAG TAAGAGCAAA AGGAATCTTT TGTTCCTCATG
128451 TGCATACACT AACTCATAGA AGGTTAATAC TTCTATAGCC TGTACTATTA
128501 TAACAAGTAT TATATATTTA TGATATATTT CCTTAAAGAA AACAAAAGCA
128551 ATATAGACAT CTAACCTGTC ACTGGCTTAT TAAGTGTGAG TGCCAGAGCC
128601 TAGGAGAAA TAAGGAGCCT GTGAATTCCT TACTCGAATC TAACCAGAGC
128651 TGCTGTGTTT GAGAGCAAGT TTTAAAAGAT TGTATGTAAT ACTAAGTTTA
128701 TTCATCTTTC AACTGAGTC CCAGCATCAC CAGATCAGTA TTTGATGCTT
128751 GGATCAATCT TTATTCTGGG GAGTGATGAA GCATTGAACC TGCTATATGT
128801 ATAGTTTGCC GAGCGTCGGC ATGTGCTCCT TGTGGCCAG GCATCCCTGC
128851 ATATAAGGAA TAGGTACGTT CTCACGAGCC TCACCTACTT ACCTCCACAT
128901 TTAGCCAGAT TCTGGGTATT AACATCTGCT GGGAAAGAGC ATCACTACAG
128951 TAGCTACAAA TAAGGTGGAA GAAGCAAAGT ATTTTCTGA GAAGTACTTA
129001 AAGAATAGAT GTGTAAATTT CTATAAACAC AAGTCTTAAA GGAAAAATGAA
129051 AAAATTTTAC ATTTAAATAA CTACATAAAT CATTGCTTAA TTTTAATAAG
129101 AATATAGCTT AATATAGCTT AAGGACAACT TGCAGTCAGG
129151 GAAAGTATTA AGAAATAATA TGCTCAGTCT GGGCGCGGTG GCTCATGCT

FIGURE 3-38

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129201 GTAATCCAG CACTTTGGGA GGCCGAGGCA GGCAGATCAC GAGGTCAAGA
129251 GATCAAGACC ATCTCTGGCTA ACACAGTGAA GCGCCATCTC TACTAAAAAT
129301 ACAAAAAAGT AGCCAGGCGT GGTAGTGGGC GCCTATAGTC CCAGCTACTC
129351 GGGAGGCTGA GGCAGGAAAA TGTTGTGAAC CTGGGAGGCA GATCTTGCAG
129401 TGAGTCGAGA TCGCGCCACT GCACTCCAGC CTGGGTGACA GAGCAAGACT
129451 CCATCTCAAA AAAATAAAAA AAATAAAAAA AAGAAATATT ATGCTCAAAA
129501 TATATAGCAA TAAGTTGGAA ACTTTTACTT GAATAATTTT TACAAAACGT
129551 ACCAAAGAAC AAAACGTGA AGAGGCCAAG TTCCAAGACT CATGTTATGT
129601 AAATTGTTCT AAAACAACAT TAGCACTTAA CAAAGTTGAA AAGTTAACAA
129651 AGCCAAGTAC TGTACTAGGC TTCCAACACT AACTAAGTAT AAAATTCCAC
129701 AGAGCTGGTT TTCTTATCTT TAAAGAAATT TGTTGGCAAG TGGTACTGGT
129751 GTTAAAAAAA AAAAAAAA AGGAAATATG TACTGACCAA AATAGAAAAA
129801 AAATATGAAG CACATTAAAA GAAAAAATA TATATTCCTG AAAACCTTGT
129851 ATAATTACAG TGGCATGGTT GGAATGTTT GGTCTATAGT TTTAACAATT
129901 AAATCCATTG AATCTGGCCC CGTACCATCC TAAAGTTTAA TTCTAGATTG
129951 TCTGGAGTTT GAGATTATAG ATATGTTTCT AAGATTTAAG TAACTTTCCA
130001 TGTTTATCTC CTTTTATGTT TGTACATAGA ATAAAAATGT TTCTATTGTT
130051 AAGAATATTA GAGTTGGACG CAGTGGCTCA CGCTATAAT CCCAGCACTT
130101 TGGGAGGCCA AAGCAAGTAG TTTGTTTGG CCGGGAGTT CAAGAATGGC
130151 CTGGGCAACA TAGTAAGACC CCATCTCTAC AAAAAATAA AAATTAGCCG
130201 GGCATAGTGG CATGTCCAG CTACTTGGGA GACTAAAGTG GGAGGATCAC
130251 TTTGAGCCCA GGAGGTTGAG GCTGCAGTGA GCTATGATCG CACCACTGCA
130301 TTCCAGCCTG GGCACAAAG TGAGACCTGT TTCAAAAAA AAAAAATTGG
130351 GTTTATCTAC TTAGATTTTC AATAAAAAAT ACTACTTAAA TCTTTACCTG
130401 CTGTGTAATT TCAAACCTT TTCTACATTT TGATTTATCT TTAATCTCT
130451 TTTTGTCTCA ATAAATGGGA AGTATCAGGA AGTCTTTTFA CTGCTCAAG
130501 GTCATAGAGA GCTTAGAACC TGGTAGTGTC CCTCTGAGCC CCAGTTCTTT
130551 CCAACCTGCC AGGCTGTAGG CCAACAATT ACTCACCCT AAGAAATTAT
130601 GCTTGTGCTG TCATGGCAGT TGCATTGGAG AAAAGGATAT TTAAGTGGCA
130651 AACAAAAGTC AGGAGAATGG GGAGATTTTG TTCTTTTGAA ATGCTAGTGT
130701 GAAGTGCTAG GCTTATTTTT CAAATGCCCA ACTCGTATTC TTTTCTTTTC
130751 TTTTTTTTTT GAGAGGGAGT CTCACACTGT CGCCAGGCT GGAGTGCAGT
130801 GGGGCGATCT CGGCTCACTG CAAGCTCCGC CTGCTGGGTT GACGCCATTC
130851 TCCTGCCCTA GCCTCCGAGT AACTGGGACT ACAGGCGCCC ACCACCACGC
130901 CCGGCTAACT TTTTTTTTTT TTTTGTATT TTAGTAGAG ACGGGGTTTC
130951 ACCGTGTTAG CCAGGATGAT CTGATCTCC TGACCTCGTG ATCCGCGCTC
131001 CTCAGCTCC CAAACTGCTG GGATTACAGG CGTGAGCCAC CGCGCCACGC
131051 CGGCCAACTC GTATTCTTAA ACGAATCATA ATTTTACCAT AAGACCATAG
131101 TTTAGTGATT GAAGAAAAAA TGTACCGAAC TGTATGATAT GATGGTGCA
131151 AAAAGAACTA ACCCAATATG AAACAGTTTT CAGGAGCATG TTTCTATTT
131201 TGGTGTCACT GGACCACTTG TGTTAAAGTT GTGAAAACCA ACACCTCTGA
131251 ATTCCACCCA GAACTCACAC TCTGCACCTT CAGAGGCCCT CAGATTGTGA
131301 GTGGCTGCCC CGAGGTGTAC TACCAACCTC CAGCTTCGGT AGGTCCGTAG
131351 GTGTGCTAGT AGGGCTAGG AAAAAACAGAA CAGATGAGGA CAGTGATGCA
131401 TACAGCTGCT TTATCTGCTC TCTCTTCTT CCCTAGCCTG ACTGCTATTG
131451 GAGGGCACCC TCCAGGCACA GTTCTGTTC CAGCCTGCTG CTGCCCCCGT
131501 GGGCCATGGT TCCAGGACGG CTCCATCTTC TGTGCTTTGG GCACATTAAC
131551 CTCTCCACGC GTCATATCT TCATCAGCAA AATGGAGATA ACATTAGTAC
131601 CACCTCATAA AGTTGTTATG AGGATCACCA GTGAGATAAT CAATCTAAAG
131651 TGCTTACAAC AATGCTTGCC ACTTGTTAAA CACTAAATAA ATGATAGTTG
131701 CTATTATATG CATACTTTTA AAAAACCTGA TGCTTTTAAA AATTTTTTCT
131751 GCTGACTAGT GAATTGTTC GTTTTGTGT TGTGTGTGT TGTGTGTGT
131801 GTTTGAGACG GAGTCTCGCT CTGTGCCCCA GGCTGGAGTG CAGTGGCATG
131851 ATCTGGGCTC ACTGCAAGCT CCACCCCCCG GATTCAAGCC ATTCTCCTGC
131901 CTAGCCTCC CGAGTAGCTG GGATTACAGG CGCCGGCCAC CACGCCCGGC
131951 TAATTTTTTT GTATTTTTAG TAAAGACGGG GTTTCACCTT GTTAGCCAGG
132001 ATGGTCTCGA TCTCCCGACC TCATGATCTG CCCACCTCGG CCTCCCAAAG
132051 TGCTGGGGTT ACAGGCATGA GCCACCGTGC CCGGCCATGA ATGGTTCACT
132101 TTTAACAGGT TCTGTGCTT AAAAAAGTTA TTAATTGAC TGTTCCTCC
132151 TTTTTTGTAC CCATCATACT TTGAATATAT AACTACGCCA GCATATAAAC
132201 ACTTCACTTG CACTATTTTA TTTAAATGTC CATCTTTCCA TAACCAAGG
132251 GTAGGAACGA AATCTTATTC ATTGTTGAAA CCTCTAGCAC ATAGCACAGT
132301 GCCTACCAAA TAGTAGGCAA AATCAGGTGT TCAATTCTAT TAACTACTCT
132351 AACACTGAAC TGAAAGTGT CAATGGCTCA AAATAATATA ATAAGCCTTA
132401 ACTCTGGGGT GCTTAAATTT ATCTATAATC TCTGCCAGTG AAGTATACAT
132451 AGTTTTTAAAG GTTAAAAAAA AATCAAGTGT TTAATGAATT TGAGCTGATT
132501 GAGCACTGAC CAGATACAGG ATCCTTAAAC TTCATAATAT CTAGTCCAAA
132551 GATGAATTTT TTTTTTGTA CAGATTCTGA CTCAAGGGA TTTGCAGGCT

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FIGURE 3-39

132601 GGGAGGGAAA TTAAATATAT AAAAAGTCAT TTTCGGCCAG GCGCTGTGGC
132651 TCATGCCTGT AATCCAGCA CTTTGGGAGG CCGGGCAGGT GGATCACTTG
132701 AGGTCAGGAG TTCAAGACCA GCCTGCCCAA CATGGGGAAG CCCCATCTCT
132751 ACTAAAAATA CAAAAATTAG CTGGACTTTG TGGTGCTTGC CTGTAGTCCC
132801 AGCTACTCAG GAGGCTTAGG CAGAAGAATT GCTTGAACCT GGGCAACAGA
132851 GGTGTGAATG AGCTGAGATC ACACCACTGC ACTCCAGCCT GGGCAACAGA
132901 GACAGACTCC AGCTCAAAAA CAATACGTTT TTTTAATCTT GTCCCTTAAT
132951 GGAAATATTG AGAAAAATGTC TAGGGGAACT CGAAGGAGAT GATTATAGGA
133001 GTTGATTATG TATGTAAAAT CAAAGTGAAT GAGGCAGTGG CAGGGGGGAA
133051 AGGGGGAACC AGTAATGACT TAGAAGTCCT AAGCATGTGT CATGGTAATT
133101 GTGACATTTG CTTCTGCGA GCGGAGCTGA CCTTGTGTG TCCGTCTAG
133151 GFACTCTCCT TTTTCTTCAT TGGTCTGATG TCCATGATGA TTCTCTGTG
133201 TAGCATCTTT GGGGCCCTCA TTGCTGTGTG CCTCATCATG GGTCTCTTGG
133251 ATGGATGCTT CATTTCCATT ATGGCTCCCA TAGCCTTTGA GTTAGTGGT
133301 GCCCAGGATG TCTCCCAAGC AATTGGATT CTGCTCGAT TCATGTCTAT
133351 ACCCATGACT GTTGGCCAC CCATTGCAGG TAAATATAAT GATTCTCCAG
133401 TAGTTATATT AATTTCATAGT ATTTTCTACT TCAGGTCTTA ATTAAGTCTC
133451 ATTTATATGT AAAACATATT ACAGGTTATT GATTACTGGT CTTTGTCTT
133501 TATGTGTGCC TTACTGGTAA CATTTTAAAT AAGACTAGCT ATTAACAGT
133551 ATGTTGAATT TGCTGAAGAG TCCCTCTTAT CCTTACTGGC AGCTAAACA
133601 CTATATAAAA CACTTTGGGA GGCTGAGGCG GGAAGATCAC CTGAGCTCAG
133651 GAGCTTGAGA CCAGCCTGGA CAACATAGTG AGACACTATC TCTACAAAAA
133701 ATAAAAATA AAAAAATTAG CCAGGCGTGG TGGCATGCAT CTGAGTCCC
133751 AGATGCACAG GAGGCTGAGG TGGGGGATT GCTTGAGCCC AGAGGTCAAG
133801 GCTGCAGTGA GCTGTGATCA TACCACTGTA CCCCAGCCTA GCGCAACCC
133851 TATCTTTAAA AAAAAAAAAA GTTGAAGATT CTGAAAGATT TCTAAATATG
133901 TCGGCTTTTG GTAAGAGATC ATACATCCCC CTGAGGAGTA GTTGATGAAA
133951 AATAACATGA TAGAAAAAAC CCAAATGCCT GTAAATAGCT AACTGGGTAA
134001 GCAAAATGTG GAATATCTAC AGTGCAATAT TATTACAGCA TAAAAAGGAG
134051 TAAGGTACAG AACTGATGCT ACCAGGTGAA TGGACCTCAA GAACATTATG
134101 CTAAGTGAAA GAAGCCAAAC ATAAAAGGTG ACGTGGCTGG GCATGGTGGC
134151 TCACACCTGT AATCCAGCA CTTTGAGAGG CCAAGGCAGG AGAATCATTT
134201 GAGCTCAGGA GTTCCAGACT AGCTTGGTA ACATAGCAAG ACCTTGTCTC
134251 TACTAAAAAT AAAAAAATT AGCCTGGCAT GGTGACACAT ACTAATATTA
134301 GTGTAGTCCC ACCTACTCCA GAGGCGGAGG CGAGAGGATC TATTGCGCT
134351 GGGAGATCAA GGCTGCAGAG CCGTGATAGC ACCACTGCAC TCCAGCCTGG
134401 GTGACAGAGT GAGACCTGT CTCAAAAATA AAGGTCATAT ATCGTATGAT
134451 TTATTTTCATG TGAAATATCC AAAATAGGTA AATTTCATACA GATAGAAAAA
134501 TGGTGACTGC CAGGGGCTGG AGAGAAAGGG ATTGGGAAGT AACTACTTAA
134551 TTGGAATGAA GTGTCCTTTT GGCATGATGA AAATATTTTG GAACTAAATA
134601 GAAGCAGTGG GTGCAAAACA TTGTGTATGT GCTAAATGCC ACTGAATTGT
134651 TCACCTTCAA ATGTTTAATT CTATTTTCATG TGAATTCAC CTCTAGAAAT
134701 TCTCTGAATG ATATTATAAA GATGCTCTAT GTTCAGTATT ACTTGGGTGC
134751 CTGTGTCAAT TAGTATTAGA AGATTGAGTA TAAATATGAT AAAATTTAAA
134801 TGTGTGTACT GTCATCTGTG TTTGGCACAT GAGGTGCTCA GTGAAGGTTT
134851 AGCTCAATTC ATTCTCATAC CCTGAACTGT ATTCTAGTTC ATGAATCAAG
134901 CAAGCAGAGT TACTACTGAG CAGACCAAAT CCAGTTTAAAG TTCAAAAGGT
134951 CATGGTCTCC TTATAGGAGA ACCCTCCATT CTTCTTCTC TCCCGCAGGT
135001 AATATAGTAT TCACTCTTCT TTCTATAGCC TACAAGCTTA GTTTTATAGT
135051 TTCTAAGTCC ACAGCAGATT TTATATAAGC AGCACTCTAG TAGTAAATAG
135101 TTTTGCTACC AGAAGTGACA GTTAACAGAG CAAGAATAAG GGAGGTAACA
135151 GGAAACTTCT AAAGCAGGCA GAACACCACC ACACAGCAAC TGGCAGCAGA
135201 AAGCTGCTGG CTCACCAGGA GGCTCTGAGG GCATCATAGT ATTACAGCAG
135251 AACATAATCA TGAGTGTTC TAAGGAGGAA GAGTTCAGGA ATGGTCTGAT
135301 TCCAAAGATA GAAAACTTGT GCATTTACAG ATATTGTCTA TTTTATATAT
135351 GCAGAATGGA TGTACACATT TTTATGTGTT GGTACTTAAT TGGACAAATG
135401 GTCAGCTATT TATTTAACAA TGTCAGATAG ATATTTAGTA CAGTATATTC
135451 CCTGGACATT TTAGATAACT TAGGTTTTAT AGTATAAGTT ATAAGAGTTT
135501 AAAAACAATA AGATAACTTT TAAAACCATG AGTCCTGGAA TTTGTTAGAG
135551 AAATTAGAAA TGTGTAGTAC CGTAAAAGTT TTCAGAAGCA GAACCGAAT
135601 ATAGAATGCC ATTAATAATT CTTATATACT TACATTTTCT TCCAGGTACT
135651 TATAAACCTT AGTCTATTTT CAAAATGTAT TTAACAACCT AACTTTTCATC
135701 CAAATTATTA AATTTAAAAA TTTTCTTAAT TTTGAATTAT GATGTTAAAT
135751 AGTTTTCATG TTATTTTATA AAAAACAAAT ACACCAAGA GTAGTTTGAA
135801 AGCTGGGCAT GGTGGCTCAT GCCTGTAATC TCAGCATTTT GGGAGGCTGA
135851 GGTGGGAGGA TTGCTTTAGC CTAGGAGCTT GAGACCAGCC TGGGTAATGT
135901 GACAAAACCC CATCTCTACA AAAAATATAA AAATTAGCCA GGCATGGTAG
135951 CATGCACCTG TAGTCCAGC TACTCAAGAG GCTGAGCTGG GAGGATCAAT

FIGURE 3-40

136001 TGAGCTTGGG AAGTCAAGGC CTGCATGAGC CATGATTATG CTACCGCACT
136051 CCAGCCTGGG TGACACAGTG AGACCCTGTC TCAAAAAAAA AAAAACGTCT
136101 ACCTTTCTAT CTTTTCAAGT AATGTCTTGG TATGAAAATC CAGAGGACTG
136151 TACTTTATGA CAAGGTAAAA GATATGAGAT CTTTTTCTTC CTATCAAAAA
136201 AGGTTTATAT TTCAGATCTG TTTCCATAAA AAAAAAATAA GTCTGATGTC
136251 TGAGATGTCT GAATCAGTCC TGTGGCTGAT CTAGACCCCT TACAGAGCCA
136301 CACTTGTCTC CCCTTGGTGA CAGCTTTTTC CCTTCTCAGG GTTACTTCGT
136351 GACAACTGG GCTCCTATGA TGTGGCATTG TACCTCGCTG GAGTCCCTCC
136401 CCTATTGGA GGTGCTGTGC TTTGTTTTAT CCCGTGGATC CATAGTAAGA
136451 AGCAAAGAGA GATCAGTAAA ACCACTGGAA AAGAAAAGAT GGAGAAAATG
136501 TTGGAAAACC AGAAGTCTCT GCTGTCAAGT TCATCTGGAA TGTTCAGAA
136551 AGAATCTGAC TCTATTATTT AATATCTTAC ATACCTCCAC CAGACTGGAC
136601 TTGCTTTTTG AATTTTAAGC AAGTTTCTTT TCCTTTTATA CAAATTGCAA
136651 ATTTTCATAT TTTTAAATCA CATCCTAGGA ATAGCACAAT AATTGGGAAA
136701 TAGAACCCCT ATCACTAGAA GAACCATTTT CTGCCACTAA ATATCTCTGA
136751 TGTTTCCATG AGTCTGAGGG CAGAGACTCT GGTATATGAA AACATGTCTG
136801 AAAGTCACAT ATTGTGAAAA TTTGAAGCTA TCTCAGTAAA AAGCAGCTTT
136851 GGAAACTGTG AATGATCTTT AGCTTGTACA AATGTTTAAA AATACCTCAG
136901 GCTATACTGA AAGGGTTGCA GTTTGGTTAG GAGTGGAAAT ATTTTGTGTTG
136951 TTAATGATGT CTTCACTTCT GGTACCTCTG TTTTACTTTC TTATGCTCTT
137001 TTGAAAACCTT TTGCAAAATT TAAGCCTGGG TTCTAGATAA TACCAGATCT
137051 ACCTAAACCT CAAGTCTATG TTAAGTTGTC TTTCTGCTG TTAATAAGC
137101 TATGATATTA AGATATTCTG ACTTGCTCCA GTGTCAAGGG ACCTTCTGGG
137151 AGCAGGTGCT AACATAGTGT TCAGAAATCA TATGTGAGAT GAAAAGGATC
137201 CCCTCCAGGA GGATCCTGAG CTGTTGAGAA ATCATTTAAG TTTACAGCGT
137251 TGTTCCCTTT GCGTTTGAGG TGCGTTTAC TCAAGTAGCC AGAAACACCC
137301 CAGGTTTCTG AATTTGTTTA AACTGTAACA ATAAAGTAAA ATAGAATGCA
137351 TGAAAGATAT TCTGGCGATT GTAACCTAGA ATTTTCTGTA CTCTGGATT
137401 TGTTGGCACT AGAACCTGAT ATTTAAACAA AGTCTTACTG AGCAGCTATC
137451 AAGTGGCAGT TACAGGCACA AATTGGTGGA GGCTGGAGGA TGGGGAGGGG
137501 AGCAAAACCC TTTATATTG TGAAGAAAAT ATCTGTAGCT GATAGAAATA
137551 ATTGCTTAAA TTGGTTTATG AAATTAATGA GTCTGAAAAG GTTAAAAGCA
137601 CTTATAAAAA GAACCAAGTC CTACATTTCC AGAAGCTTCT GGCAAAATTT
137651 TGCACTCATA TTATTTATCC TATGAACATT CCCATTGTTT TTTTGTGCTA
137701 TTTATATACA AGTATCATA AGAAAGCTCT CAGTTTGAGG ACCCAAAATA
137751 AAACCAAGT CATGCCATGA CCCATACTCA TTTACAAAAA CAAGAACTCT
137801 TTCCTCTATC CCTAAAATTA TGCTTTAGTA CTTGAGGCTT TTAAGGTTA
137851 GTGCTTTTGA TTGTGAAGAC ATTGAGCAAC TTAAGTTGTC ATACATGCAG
137901 TTGCACCTTA CCACCTCTAA TAGTGTGATA TTTTATATTC AGGGGACTTA
137951 GATAATTTGC CTGTGGATGG TTCTTTTGCA GGAAAAAATA TCTACATTTT
138001 GACCATACTA CCCTTTTATG TTCTTATTAT AAGCTTTTAG AAAATGATTT
138051 CATTCAGTCA TGTCAGGTTA TATAAAACGT TACTTTCTCA TTTTGTAGAA
138101 GTTCAACAAA ACATACTACT AAGACCAATC ATCAAAACCA CTATTATAAA
138151 TTTTAATTTT GGTGGGTTAA GGTGGCTTGC GCCTATAATC CCAGCACTTT
138201 GGGAGGCTGA GGAGGGAAGA TTGCTTGAGC CCAGGAGTTT GAGACAGGCC
138251 TGGGCAACAT AGCAAGATCC TGTCTCTACT AAAAATAAAA AAAAAAATA
138301 GGCCAAGCAT AGTGGCTCAT GCCTGTAATC CTAGCACTTT GGTAGTCCAA
138351 GGCAGGGGGA TCACTTGAGC CCAGAAGTTC AAGACCAGCT TGGGTAACAT
138401 AATGAGACCC TGTGCTACA AAAAATTTAA AAATTAGCCA GGCAATGATG
138451 TGCCCACTG TAGCCCAAGC TACTCAGAGG CTGAGGTAGT GGAAGGATTG
138501 CTTGAGCCTA AGAGATGGAG GCTGCACTGA GCTATGCCAC TGTACTCTAG
138551 CCTGTTCAAC TGAGCAGAAC CCTGTCTGTA AAAGAAAATC AAAAAAATA
138601 AATAAATGTT AAATTTTGT TTAAGTTTAA GCACAGACTC CCCTCAAAAC
138651 ACCTTCTCCC CAATTTTACA GAAAGTAATT CAAAAATGAA AACTTTACTC
138701 TGTAAAGACC TCTACAGTGT TTTTCTTTTC AAAATTTGGC TGATTTTAGG
138751 AAAAAAGTGA TCATCTGAAA CTAAGAGAAA TTGCTTGGTT AGTTTCCATA
138801 TTAACACAGT AGTGACAAGT ATATATAACT TAGATCTCAG CATATGTGTT
138851 TGTATATTAA ACTTCACATA TGTAGTTTTC AGTTTAAATG AATGAATCAA
138901 ACTGGATCTA TAACACTGAA AAAGTTCTAT TGTAAATAGC TCATACGGAG
138951 AATACTCTGC TATAATAATA TAAATTTAAG AAGAAAAAGT ATAAACGTAA
139001 GATGCTAAAT TCCATAAATG CATATTTAGT ACTATGTTTT TTGTGGGAAA
139051 AGTTCTAAAA GTTTAAATG CACAAAGAAA ATGAAAAATA CTAATATAAA
139101 AATTTGTGCT TTAATCTAGT CAAACTAAAT CCTTCTAAT TTCTGAATGA
139151 AGTGTACTG CTGCAATAAA GTGACCTGAT AAGCCTAAAT TTTTGTGTT
139201 CAATCCAGAC ACTTTTCTGA GAGTCTGAAA AGAATACAGA GTCAGAACTC
139251 TGTTTTATC TCCTCATCCT GTTTTGTATA AGACTCAGAA AATTCTCAA
139301 TTGAAAAGGT TCTGGCATTT GAGGCCAAAA AAAGCATGAA AGGGAGTAAC
139351 ATTCCTTTT ATAGATACTC TAGATTGGAT ACTATTGTA CAGATGGCCA

FIGURE 3-41

WO 03/076644

PCT/US03/06667

47/65

10/506513

139401 AGAAACTTCC AGAAACATTT TGGTTAAATT TTATTGCAAT GGATATTGCT
 139451 GGGATCCATC CATTTAAGCA GTAATATACC ACCCAGATTA TTGATACTTT
 139501 ATGCAAGATG TGTTCATCTC TTTGATCATA TTTACAATGC TTACTCCATA
 139551 GCCCTGCTAC AAGACTTAAA ATT
 (SEQ ID NO: 3)

Feature:

Start: 2104
 Exon: 2104-2446
 Exon: 87054-87198
 Exon: 91571-92024
 Exon: 120932-121075
 Exon: 133151-133379
 Exon: 136340-136569
 Stop: 136570

Sim4 results:

Exon: 2104-2446, (Transcript Position: 1-346)
 Exon: 87054-87198, (Transcript Position: 347-491)
 Exon: 91571-92024, (Transcript Position: 492-945)
 Exon: 120932-121075, (Transcript Position: 946-1089)
 Exon: 133151-133379, (Transcript Position: 1090-1318)
 Exon: 136340-136572, (Transcript Position: 1319-1551)

SNPs:

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
352	A	G	Intron			
381	C	T	Intron			
3505	G	A	Intron			
10280	G	C T	Intron			
11107	G	A	Intron			
15750	T	C	Intron			
16004	T	A	Intron			
16871	A	G	Intron			
17163	T	C	Intron			
17966	A	G	Intron			
19392	C	G	Intron			
20113	T	C	Intron			
20434	G	A	Intron			
21243	T	G	Intron			
23009	C	T	Intron			
24699	-	T	Intron			
28058	A	T	Intron			
29600	T	C	Intron			
31455	A	G	Intron			
35653	T	C	Intron			
42700	A	G	Intron			
45516	G	A	Intron			
51789	C	T	Intron			
52042	C	T	Intron			
52139	T	C	Intron			
53089	A	C	Intron			
53117	C	A	Intron			
53434	-	T C	Intron			
55431	T	G	Intron			
55905	C	T	Intron			
60567	C	T	Intron			
60751	C	T	Intron			
60755	G	A	Intron			
63301	T	G	Intron			
64573	T	A	Intron			
76462	T	C	Intron			
77652	G	A	Intron			

FIGURE 3-42

77819	G	A C T	Intron			
79594	T	C	Intron			
84331	A	T	Intron			
86107	C	T	Intron			
86175	A	-	Intron			
87109	C	T	Exon, coding	133	V	V
89444	A	T	Intron			
90535	G	A T C	Intron			
91163	T	A	Intron			
93488	A	-	Intron			
96065	T	C	Intron			
96351	C	T G A	Intron			
96701	T	C A	Intron			
96879	T	-	Intron			
97648	G	T	Intron			
97814	A	G	Intron			
98430	C	T	Intron			
101268	A	G	Intron			
103881	A	G	Intron			
103926	C	T	Intron			
107845	C	T	Intron			
109010	-	T	Intron			
109623	G	A C T	Intron			
110188	A	T C G	Intron			
111006	C	T A	Intron			
111223	A	G	Intron			
111457	T	C	Intron			
112168	T	C	Intron			
112653	G	-	Intron			
114155	-	A T	Intron			
114181	-	T	Intron			
114183	A	T	Intron			
115964	A	C	Intron			
118100	-	A G	Intron			
119631	A	G	Intron			
120833	T	C	Intron			
121125	A	G	Intron			
121245	C	T	Intron			
121521	G	A	Intron			
124296	C	T	Intron			
124549	G	A	Intron			
124858	G	T	Intron			
125920	A	T	Intron			
126266	A	G	Intron			
128258	G	T	Intron			
130303	C	A	Intron			
130617	C	A	Intron			
130910	-	T	Intron			
131727	C	T	Intron			
132895	G	A	Intron			
133506	G	A	Intron			
135473	G	A	Intron			
136201	A	G	Intron			
137080	A	C	Intron			
138022	T	C	Intron			
138543	A	T	Intron			
138681	C	T G A	Intron			

Context:

DNA
Position

352 GATGGTTAGCCAGGGATTATGGGTTTTGGCAGGAAGACCACAGAGGTAAAGTACCATTTT
 CATCACATCATATCGGGGATACATTATCATCTAGTTGAGGTACTGTGTGCCATTTTTCG
 ACCCTAAAGTTATTCTTCCCGCCACTCCCGCTTCCATCCTATACTCTTTGGAAGAAAG
 TTACTACGCATACCCACACTTAAAGAGTAAACCATTGTACTTCACCTCCATGAGGGAGGG

FIGURE 3-43

- AGTATGTTTCATAAAGTATTTACATTTCTCTGCAGGAGAGATTTGTCTATTCTCTCTCATT
[A,G]
TTTATTTAATCATTTACTTACATCAGTACTGACTCGTGGATAATTCTTACATATGTGTTT
GTTTGTGTCATGCAAATATATAATCGATGTGCTTTCTTTGCCCAATAATATGTTGTGGA
CAACTTTCAAAGTCAATAAATACAGATGACCTTCAGAACTTTTAGAGGTTTAAAGTAAG
TATCTAATCAGTCTTCTACCAATGTACATTATACTTCCAAATTTCTTATTTCCAACAA
TACTGGGGTATCATCTTCATACATACATTTTGTGCACCTATGTGCCTATTCTTTGTTT
- 381 CAGGAAGACCAAGAGGTAAAGTACCATTTTCATCACATCATATCGGGGATACATTATCA
TCTAGTTGAGGTAAGTGTGCTATTTTTCGACCCCTAAAGTTATTTCTTCCCCCACTCC
CCCTTTCCATCTTACTCTTTTGAAGAAGGTTACTACGCATACCCCACTTAAAGAGTA
AACCATTGTACTTCACCTCCATGAGGGAGGGAGTATGTTTCATAAAGTATTTACATTTCT
GCAGGAGAGATTTGTCTATTCTCTCTCATTATTTATTTAATCATTTACTTACATCAGTA
[C,T]
TGACTCGTGGATAATTCTTACATATGTGTTTGTGTTGTGTCATGCAAATATATAATCGAT
GCTTTTCTTTGCCCAATAATATGTTGTGAGCAACTTTCAAAGTCAATAAATACAGATGA
CCTTCAGAACTTTTAGAGGTTTAAAGTAAGTATCTAATCAGTCTTCTACCAATGTACAT
TATACTTCCAAATTTCTTATTTCCAACAATACTGGGGTATCATCTTCATACATACATT
TTTGTGCACCTATGTGCCTATTCTTTGTTTACTATTTTACCCTCATTTCTAAGGCAGAT
- 3505 GGCTGTTTAGGCAAAAAACAAATCTAAGACCTTCTGCATGACACTTTAACATAAATTCTT
TCACTTTATCTGCAAGGTGAGCGGGTCAACCCCATTTGGGTGAGAAAAGTGTAGCTCA
GTGAAAGTGTCTTGGTGGGTAGTAGAATGGCAATAAACACATATCAACTGACTTCAAGG
GCTAAGTGATTTCCATTACTAAATCAACCTCCCTCCCATCATTTGGGGTAACTTTATAT
GATTAATAGTCTTTTTTTTAACTTGATTTTCTATTATTTTAGAGTGAATATTTCTTA
[G,A]
GTCTTTAGTATGCATATGAGGAATGGGCAAGACTGTAATAAATCTGAGACAAAGGTAAT
GCTGGGTATGCTGAGAGTTTAAAACTGACATAAATACTATTAACTATTGTATCAT
TCTGCAACTTACTTTCTTCCATTCCGCATCATGTTGTGACTTATCCACATAATACCTC
AGTGTGAACGTATAACTCAAATCTTTCCATTTTAACTTAGGTGGTTTGCAATGTTTGAC
TATATTACTCTATGCATTCTCCCTCTGATGGGCATTAGATTGCTTCCAACTCATTC
- 10280 TGGGAGGGAGGTAATTACCTGGTGGGAGGTAATTGAATCATGGGGGAGGTTTCTCTGTG
CTGTTCTTGTGATAGTTAATAAGTCTCATGAGATCTGATGGTTTATAAAGGGCAGTTCCC
CTGCACACTTTCTGTTGCTGTTGCCATGTAAGACATGGCTTTGCTCCTCTTCACTTC
CACCATGATTTGTGAGGCTCCCTAGCCATGTGGAAGTGTGAGTCCATTAAACCTCTTTT
CTTTATAAATTACCCAGCCTCAGATATTTCTTCATAACAGTATGAAAATGGAGTAATACA
[G,C,T]
TCCATTACCATAAAGAAAAGGCTTTTCATGTACATTATTTTTTAGAGTAGCCTTGTGGTAT
GTCATTACCTCCATGGATAGATAAGAAAGTTGCAACTTGCACAGTATTAGGATTGATATC
AGTATTTACTTTTATTAAGTTGAAGTAAAGAGCAGCTTTTGGCTGGAAAAAGTTGTAC
TTATGTCAAAGTTGTCTGAAAGTAGAATCTTACTCTGTCCCGAGCCTGAACTATTFTA
CTACATATTTACTTGCATGTTCTTTAGAATATTCTCTCAATAGTGTCTCTACTCAAGTC
- 11107 GGAACTCCAGCACACCTGGAACTGGGCAGACCCACCAATAAGACAGATAGCCTATCA
GTGGCTGGAGGAATGGAGGAAAGCAGTGCTTTCAAATGTACATGCCAAATGTGTATGATC
ATACCTCTTTGTTAAAGTGCCCTTCTTAAACAGCAAAAGTAATTCCTCACCTTGCATATAG
GAACTAAAAAAGTGGATGAAGAAATGGCTTGCCTTATTTTCAAGTAAGAAGTCTTTT
TCATTTCACTAATTTTAAATATGGGCATAAGTATGAATACAGATTAGAAATACTGAAT
[G,A]
TGGACCAAAGCAATGTTTCTTTGTGGACCAAGCAGTGAATCTTTTCTTTCTTTCTT
TCTTTTCTTTTGTAAAGAGACAGGGTCTTGCTCTCTGCTCAGACTGGAGTGCAGT
CAGTGATGTATGGCTCACCATAAACCCTCAACCTCTTGGGCTCAAGGGATCCTCTGCCCC
AACCTCCTGAACAGCTGGGATTACAGGCACATACCACCACACCTGGCTAATTTTAAAAA
TTTTTTTGTGGGGAGGGTCTCTATATTGCCAAGCTGGTTTCAAATGCCTGAGCTCA
- 15750 TGGCTCACTGCAGCCTCGACCTCCTGGGCTCAAGTGATCCTCCACCTCAACCTCCCAAG
TAGTTAGGACTACAGGGGATGCCGCTACACGTAACATAATTTTGTATTTTGTAGAG
ACAGGGTTTGTCTTGTGCCCAGGCTGGTCTGAAATCCTTGGCTCAAGCAATCTGTCC
ACCTCAGCCTCTGAAAGTGTGGCATTACAGGTCTGAGCCACTGGCCCCAGCCTAGATTT
TTTTGAATTGTAAAAAAGTAACCTGCTCCCTACTGAAGTAAATAGAGTTAAAAAAGTAA
[T,C]
CTGGTACAGACACCTGTATTTTCTGACACCCCTAGAAGAGTCCAGGTACCTTATAATCA
AATACATTAACTTTCTGCAGCAAAATGTATGGATAAGTGAGTTAAATAGAGACCATGAG
TAGCTTCAGGTGAGTTTCAAGTATTTGCTTCAATTAATGTTGATATTTCTTTACA
AAAACCTTTGGGTTTGGGTTTTCAGATTGCAAATAAATAATTATAAATTAATTTT
TGAGACAGAGTCTTGCTGTGTTGCTCAGGCTGGAGTGCCATGGCAGGATCACGGCTCACT

FIGURE 3-44

- 16004 AAAGTAACCTGCTCCCTACTGAAGTAAATAGAGTTAAAAAAGTAATCTGGTACAGACAC
CTGTATTTTCTGACACCCCTAGAAGAGTCCCAGGTACCCCTATAATCAAAATACATTAACAT
TTCTGCAGCAAAATGTATGATAAGTGAGTTAAATAGAGACCATGAGTAGCTTCAGGTCA
GTTGAGATCAAGTTTTGCTTCTAATTAAATGTTGATATTCTCTTACAAAACTTTGGGTT
TGGGTTTTCAGATTTGCAATAAATAATTATAAATTATTATTTTTTTTGAGACAGAGTCT
[T,A]
GCTGTGTGCTCAGGCTGGAGTGCCATGGCAGGATCAGGCTCACTGCAACCTCAACCTC
AGGCTGAAGCCATCTCCACTTCAGCCTCCCAAGTAGCTGGGACTACAGGAGTGTGCCA
ACATGTCCAGCTCATTTTTGTATTCTTAGTAGAGACAGGGTTTCGCCGTGTGGCCAGGC
TGGTCTCAAACTCCTGGTCTCAAGTGATCCGCTGCCTTGGCCTTCCAAAGTGTGAGAT
TATAGGTGTGAGCCACTGGCCTGGCAGAATTATACATTTATATGTCAATATTGCTTTT
- 16871 GGGTATGAACAACCTTTATAACACCTGTTACACATTGCCAGATTATCTTTAGAAAACTTG
AATCAGTTTATTGTGCCACAGTGATGTGCTGGCTTCTGAAAACTTACCAATGTTTGG
TTTTATTTTATTAGTATTTGCTAATTTGATAAGTACTAATGATATTTTTTAAAAGTAGT
TTAAATCATATTTTCAAGTCTTATAAGTCTGTGTTCCAGTTTTTGAGCCCTTTAGAAGC
TGCAATGACCTGGCAATTATATAAATTTGAAAAACAGAGGACATATGCCAGTGA
[A,G]
TATATTAGAGTAAAACTTCATTCCCATAGGTAATGAAGGAATGCTTGAGATTATCTTAGG
CCTTAGATTCTCACCTGACACATCTTGGCAGGTAGACCATGTCTTGTTCCTCTGCTGT
CTTAGCCAGGTGTTGATCAAGGTCTGTCTTAGGGCGGGGATAGGAATGGAATAAACCC
ATGTAGAGACTTGGCATGAGGACTTTGTGATTCTTCCAGGTGACATCTCATCCTTCAGA
GGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTCTTCAGTGCTATCACCTTGATCA
- 17163 GCCAGTGAATATATTAGAGTAAAACTTCATTCCCATAGGTAATGAAGGAATGCTTGAGAT
TATCTTAGGCCCTAGATTCTCACCTGACACATCTTGGCAGGTAGACCATGTCTTGTTC
CTCTGCTGTCTTAGCCAGGTGTTGATCAAGGTCTGTCTTAGGGCGGGGATAGGAATGG
AAATAAACCATGTAGAGACTTGGGCATGAGGACTTTGTGATTCTTCCAGGTGACATCTCA
TCCTTCAGAGGATCAAGTCTGCAAGAGTAGCCATATCTTAATCTCTTCAGTGCTATCAC
[T,C]
TTGCATCAACCTCTGGACTCGAGCTAATTCGGTTGAAAAATTTTTATTAATTAATTTTGG
GGTATGTTAAAAATTTTGTGTGCATGTATTTATTAGTATTTTTATGAGACAGGGTCTC
GCTCTGTCAACCATGTCTGGAGTACATACGGTTGCACGCTCATGGCTCACTGCAGCCTTGA
CTTCCAGGCTCAAGTGATCTCCACCTCAGCCTCCTGAGTAGCTGGGACTACAAGTGC
ATGTCAACCATTTGGCTAATTTTCATATTTTTTGTAGAGACGGGGTTTGGCCACATTGC
- 17966 TCAAGCGATTCTCCTGTCTCAGCCTCCCGAGTAGCTGGGATTACAGACACACGCCACTAT
ACCTGGCTAATTTTTGTATTTTAGTAGAAATGGGGTTTACCATGTTGGTCAGGTGGGT
CTCAAACTATTGACCTCAGGTGATCCACCTGCCTCGGCCCTCCAAAGTCTGGGATTATA
GATGTGAGCCACCATGTCCAGCCACCATTTAATTTTTTGTAGCAGAAATATGACTGAG
AGCCACGCAAGAAACAAATTCGACTTATCCATGCTCTTGAGAGGTGATGAGGGGAAACA
[A,G]
AATGATACATAAGTAACTCTGAGAGAATATGCTGCACATGCTAAATCCTGTGCAAGTAAG
ATATAGGATTTTAGAGGAAGGGAGAATGACTTCTGATTGAGCTGACTAGAGAAGGCTTCA
GTTTTTGTAGTTAGGTGTTAGGAGATTGGGAGACTTTCTCAGCATATCTAACAGAAGAGG
GTATCCGAGGTGAGAGTGTAAAGCCTGGGCAAGGGTTGGGAGGCAGTCTAATACTGAAT
GTTCTGACTGTGGTTACTATGTATTTAGGTATTGTTTAACTATCCAGTAATCCT
- 19392 GAACATGACATAATGGAACCCAGAAATCCTGTCTTGAGCGGACTCAGGGGCTGCTTCTA
GGTAATTTAGTTTCAATTTCTACTGAAATCATTATATTTAAAGTATGGCCGCACTGAGATG
GCCACTGTAGCTGCTGCCACCTCTTAGCTTTGGTCTTAAAAAAGTAATAGAA
CTTCCTTAAATGTCTTCTAGCCTTTGGATTTCTCTAATTCAGATTGCGTCTTCCAA
GGGTCAAAATTTATTTTTACTATCCCTGTCTTAGGTATTTCCTAAACTTGGTCTTAAGA
[C,G]
TTAGTCATTTTTTTCCTTCAATTTGACATGACTGCTAAAGACTTTTGGCATGTTCTCCT
CCTTTCATTTGTGATGTAATTAAGTTGGTCTGTAAGTCTTATTTTTAAGATGTTCTAGAC
CAAGAGACTGTGAGAATAGCTTACAGTCATTTCACTAATTTATGTATTTTAAATTTAA
GTATTGACAGTGGTGAACCTGTTCAACAAGCAGATGATGTTATCTTATATATTCACAG
AGTTTAGTAACTGAGCCAACTACTTCATTACAGTTCAAAATGAAACAGCTAATTTCTTT
- 20113 TTGAGAAATATGGACTGTTTTTGACATTTCATAATGGACATTTGAGGTTTGTAGGGGAG
GAGGTGTCTCTTTATGGCACTTTCTGGCTGGGAAGGGAGTCAGTCTAATTTGAGATAAT
AACTAGCCACCTGGCCACACACAAGTGTGTTTTGCCTTAGTTACCTGTACACACTGAGC
AGTGAGACTCAAGAGAGTGTCAAAGTACTTTTCAATGCATAAAGCACTACAGATCTGTCC
ACACTGTTGTGAGTGAGCAGGTTGGCAOGGTGCTGTGTGCGGGGTGTGTGTTGACTCA
[T,C]
GTGCTGTCTGTGATCTCTCAGGACTCAGGTCTGAATTGCTCTGTTGTGACTGAAGCCC
AGCTGAAGGTGCTGGAAGTGCAGTGACCCCTGGAGGAAGAACCAGTAACAGCAGAGGGTGG

FIGURE 3-45

- ATGAAAGGGGAATTGATAGTTGTGTAAGAATAGATATCTGCCGTTTTTGTGAAGCCAAGAC
ACCTTTACCCCTCCAGTAATTGTTTCATCTTTTAATATCATTTGGCTTCATTTACAGAAT
CTGTATTAAAGCAAAAGTCAGCATGTAAGGTGGTATTTTGACCACATTTGTCTGCTGTG
- 20434 AGGACTCAGGTCTGAATTGCTCTGTTGTGACTGAAGCCAGCTGAAGGTGCTGGAAGTG
CAGTGACCCCTGGAGGAAGAACAGTAACAGCAGAGGGTGGATGAAAGGGAATTGATAGTT
GTGTAAGAATAGATATCTGCCGTTTTTGTGAAGCCAAGACACCTTTACCCCTCCAGTAAT
TGTTTCATCTTTTAATATCATTTGGCTTCATTTACAGAATCTGTATTAAAGCAAAAGTCA
GCATGTAAGGTGGTATTTTGACCACATTTGTCTGCTGTTGTGCTCTGCGGTGAACTGAA
[G,A]
TACTGGCTTACTGACTAGTAAATATGTTTTCTGACAATTATAGGGAAGGGAAGAAAAGGA
AAGTCCAATTTAAAGCATTTTCTCCTCAGAGTTTGAAAAATAGAATTCATGCAATCTTTT
AAATTCATGCCAACACATCAGACAAGAAGAGACTTGATAGTAGTAAAGGTTGGGAATCA
AAAGAACAATGTAAGTTTTTGATATTGACTTCAAAACATGGTGTCTATAATTTAGTGT
CATTTGTTACGTGTATGGTATTATAATTAATTTTGATATGTGGTAGTTATTTTGTAC
- 21243 TAAATTAATCAGCGGTCACTAATCTTTGGATAATCACTCTATTGAGCTGGAACATCCTT
AGTATTTTGGAAAGCAAGTCAGTGAGTTAGAACTGTCAAAACTGATCAGCTTTTCTAAGC
TTAATGATAAGTGAATAGAACTAGTTGCCCTTCAACCTTTCTCCTCCCTGCATTGCAGCAT
GATCATTTCTGTAACCTTGGAATGGTTATGGAACAACAGTGAAAATACATTGATACACT
GTCTTGTTGGTAGATTTTCAGATAGGCTTTAGACAAAGTTTCAGAGCCTTCTCTAGCTGG
[T,G]
GATTAACAAAGCTGCCCTTCATAGTTAAATGTTTGACCCCTGTGTATGCATTTTCAGTTAC
TAGAATTAGGTAAGTTAGTGTATATAAATTTGGTTTGAAGTGTGGATTGTTTGAAGAGTGAG
TCTTTTGGTGGCAGCAATTCGTGTATGCATTAAATAGATACATATTTTGAAGTGTGAGC
ATTGTTTCAGTCTGTATTTATTAGATGCTGGGGTGGGTATGGGAATAAAGAAACGTATGA
GGGGTCTTGGAAAAGTTCATGAAAAAATGTACACTATGAAAAAAACTGTGCATGGATT
- 23009 TTCTTTCTAATCTTAAAAAATATTTAAAGGGCACTATTTTCTTCAGTTAATAATGTA
AAAAGGACTGCATTGACATGATTAAATTCCTGGGACCCTCAATTCCTTAGAGATGGACTA
ATGGCTGGTATCAACTCACAAAAGTATCTTGAACCTGATGGAGCTTATGTTGAGAAATGA
AGTGTATATTTTCATTATCTTTAATTTTCATTCTTTAGTGAATTTTGTAGGTTCCCTTG
TATACATTTTAATCCTAAGGGAATAAAGAAAGGAGGAAGTCTAGCCCTGTGCTGTCTGC
[C,T]
TAGGTACAGTGTCTGAAACACAGACCAGTATTCACCTTTGAAATTTGAGGTTTCATTTC
AGGAGGTTCTCAAAGAGAATAAATGAGATTGCTATGCAGGTGGAATCAAAGAGCACACGG
CTTATTTATCATAATCAAATAATGCCATTTTCATAACAAACTTCACCTGCTTATGTACA
TTGTAAATTTGTGCTTGATAAGCTTCCCGGAGATAAAGTAATTCAGCTAAGTATTATTT
CCAATCATAATTTGTGTCTATTATGAGCAACACAATACTATATATGGGATTGATTCACTG
- 24699 TTTAGAGGATTGGATGAATAGTGGTGCTGCCAATAAAGAAATTTAAATATGGCTGATATT
TCCTATATTTAAGAAAGACCAAGAGGGTCCATTGAAATGAGTCAGTGGGAAATCTCTGA
TGACTTCAGCCAGCAAGCTTTTCATCGGCTGGATATATGGGAAGTGAAGTCTGATTATAG
TCTGTGGAGCAGTGAATGGGAGGAAGAGATAGGGGTACAGGCTAAGAAGGGAGGAAGTCA
AGTCAAAGGGAGAGTAGGGTGGTAGCTAGAGGAAGATTAGAGTCAAGCGAGGGTAACAA
[-,T]
TTTTTTTTTTTTGAAGATAGGAGTAGCTTGAGAACTAACTTAAAGAAGGAGCCTGTAGA
GAGGAGGAGGTGAAGTTACTAAAGGTCTAATTGATGGGGTAAGGTTTCATGAGCAGATCA
GATCTTTACAAGGAAGGTTCTTGCTGGGGGGCAAGATTCAAAACCCCTATTTCAGAACCA
GAGAGAAGAAAGTAAGAATGGGAGCAATGTAGGTAGGTTTGGTGAGCATCAGGAAATGG
AGGGGAAGAGGTCAATTAATGTGGTCTGGGGTTGAGCAGCAGATTGGAAGAGAATGGCA
- 28058 GCAAGGTGTTTTTCGATCACATGGAAGGGGAAGAAGAAGCTATCAGGAGCTCTGGGTT
TTTTTGTGTGTTGTTGTTGTTTGGCACTTTAACTCTCAAGCTAAAACTGGGTTTC
ATTTGAGGAACCAAGTAATAGAAAATTTCTTATGTACATTTCAGCAAAATCTAGTACTGAGT
GGTACTTTGGCTTTTCATTGTGGGATTGTGTGTGTGTGAGTACATGCACGCACTTGTG
TGTTTAAGCGTGAAGGCAGACAGACAGTGGGTACAGGTCTTTGAAATGGACTTCTTGGC
[A,T]
AAAGTAATAGAGAAAAAGAGGAATACAAATAAGGGAGGAGGGACAGGGAAGAGCAGAGTC
ACAGGAAACAGTGAATGAGGCTGCAGTCTCAGTCCGCCCTTTCTTTGTCCCTCCAGTGTG
TTGCCCTGTCTTATGATGATGCTGGTTTTTCAGCCAACTTGAGTGAGTAAAAGCCGGTCT
GAGGTCTCAGTGCTGCGTGGCTGATATGAGCAGCTTGCAATTTCTGACTGGGCCCTGGAG
CAGCAACAGCACAGATTTCCAGGAACAGTTCCTCTTGTCTATTTTATTCTGAGTCATCA
- 29600 ACTGCAACCTCCTTAAAGCTACATTATTTAAAGTACATACAAAGCAAGTTGCAGAAGC
CTGTATGTAGTGGATTCTATTTTTTAAATAGTATTTAATTGTATGTTCTTCTACACTT
TTTCTATGTCCATCTTACCATAGCTGTGCTTTTTTGGTGGAAAGTGAGGACAGATTGCT
TTCCACATCTCCATTTTGTGTCTGAATTAAGATGGACAAGTATCATGTATTATCTTA

FIGURE 3-46

- GTAGTCATCAAAACAAGGAAAAAGGTTTCTTTGTTTGCTTGTTTTTTTAGATGAAGTCTC
[T,C]
GCCCAGGCTGGAGCGCAGTGGCAGGCTCTGGCTCACTGCAACCTCTGCCTCCTGTGTTC
AAGCAGTTCTCTGCCCTCAGCCTCCTGAGTAGCTGGGATTATAGGCGCCTGCCATCAGGCC
GGCTAATTTTGTATTTTGTAGTAGAGACAAGGTTTGCCAAGTTGGCCAGGCTGGTCTTG
AACTCCTGACCTCAGGTGATCCACCTGCCCTGGCCTCCCAAATTTGTTGGATTACAGGCG
TGAGCCACTGTGCCGGCCTGAAAAAGTTTTTAATGGTAAGATGTCATGGAATGAATA
- 31455 ACTTAATTCGTTGTGGGCAGCCAGATCTTTTAAAGGTAAATTTGAATTTCTCTTTAAGAA
AATGGCAGACAGAAGGATGGGGGATACTAGAAAATAAAAGTAGTGCCCTCTTGAAGAT
AAAACATAAACATTTTAAAGCCTGGAATTGCTTTAGCAGTACATGTATTGATTATTTAATT
TTGTCTTTTGAAGAAAGTTGGCCCAACACAATTACATGGAAGTTGGGTATTGAAGAGG
ATTGATAAAAGAAGTGGGAAGGTCAGGCCAGGTGTGGTGGGTCATGCCTGTAATCCAGC
[A,G]
CTTTGGGAGGCCGAGGTGGGTGGATAACGAGGTGAGGAGATCGAGACCATCCTGGCTAAC
ACGTTGAAACCCCGTCTCTACTAGAAATACAAAAAAATTAGCCAGCATGGTGTGGGT
GCTGTAGTCCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGGTGAACCCGGGAGGCG
GAGGTTGCACTGAGGCCAGATCAAGCCACTGCACTCCATCCTGGGCGACAGAGCGAGACT
CCGTCTCAAAAAAAGAGTGGGAGGGTCAAGCCAATGTGCAAGT
- 35653 CTAATAGAAAAAATATATATTTTGTCAAATATTTCTGTTTTATTTCATTTCATTCAAAGT
ATATTTGGAATGTTTTATTTCCAGGAAATTTTGAATATACAATACAACCAGCTTCTTATA
ACTCCACTTTAAGTGAGCCATAGGTCAAATAATGACCAGCAAATGTAATGACACGTGTG
CCTCTTACTCCTGTTGGAGGAATTGAGGCACTCTGGTAACCTGTAGGCTGGATTAGT
CCAGTTTATTGGCAGCAGCATTTATCCAGATTTTATTGTGGCCGCAACGGTGGCTCACAC
[T,C]
GGTAATCCCGCACTTTGGGGGGCTGAGTTGGGCTGTTGCTTGAGCCAGGAGTTCAAG
ACCAGCCTGGGCAACATAGGAAACCTGTCTCTACAAAATATATAAAATTAGCTGGGCG
TGGTGGGCTGTGCTGTAGTACCAGCTACTTGGGAGGCTGAGGCAGGAGGATCACCTGAG
CCAGAAAGTTGAGGCTGTGGTCACTCTGATTATGCCACTGCACCCAGCTTGGGTGAT
ACAGTGAGACCTGTCTTAAACAAACAAAGAGATTGTATTGTGTTTTGAAAAACATAGT
- 42700 AGCTTTTCTCGTCTCTACTGAGGCCAAAAGGGGCACTGATACCCTTGAATTTTCTCTTA
AAACAGGGTTTCATTTCTTTGGAAGTTTGTCTTTGAATCTTTCTGTCACTTTAAGTGT
TATCATCAATTTGGTTAGCATTCTAATAATAATTATAATTATAGTAAACATTTATTGAGTG
CTTACGAAGAGCCAGTTCCAAGCTTTTATCTCCATTATTCTGCTACTTCTCTCTCAT
TTTACAGATGAGGAAATGAGGCACAGAGTGGTTAATTAATCTGTTTGAAGTCCCGTAGC
[A,G]
GGTCAGTGATGCCAGGTTCAAACCTACACTTAACCTACACTAGAGACTGTTTTCTTAA
TTATTTCTTCACAATCATATGTTAATGATTACTTATTGATTATTTAGTGGTCTGATTAAG
AAGAGGGAGCGGTGCTCTTCTGTTGGAGAAGAAAGGCTGGCTGATCAAGACACACTGGTT
GGTTTGAAGAAAAAATATAGATGTTAATTCATAACACCACTCTAAACATTTCTACTG
GACGAGTTCACCTGTGTGCCACTCGAAGTCGGATGCAAGTAAGGAAGGCTTTTATTGAG
- 45516 GTTACTAGCTATGTAATCTTGAGAAAACTACTCAATCTCTCTGTGCCTTAATTTTCTTAG
GTATAAAGCAGATACTAATTATGCCATCATAGGGTAGGTATGAGGATTAATGAGTGAGT
ATTTGTAAAACACTTAAACAGTGACTGACTTGGGCTACCCCTTTTGGGTCCCTCCTT
TGATGGGAGCTCTGTTTCACTCTATTAAATCTTGCAACTTCACTCTTCCAGTCTGT
GTTTGTATTGGCTCAAGCTGAGCTTTGCTCGCTGTCCACCACTGCTGTTGCTGCACTC
[G,A]
CAGACCCGCCCTGACTTCCACCCCTCTGGATCCGGCAGGGTGTCCACTGCACCTCTGGT
CCAGCGAGGTGGTGCCATTGCGCTCCCAATCGGGCTAGGGGCTTGCCATTGTTCTGTC
ACGGGCTAAGTGCCCTGGGTTTATGCTAATTGAGCTGAATAGAGCTGTAACACTCACTGT
ATGGCCCAAGGTTCCATTCTTGAATCTGTGAGGCCAAGAACCCAGGTCAGAGAAGAA
GAGGCTTGCCGCCATCTTGAAGCAGCCCGCCACCATCTTGGGAGCTCTAAGAACAAGGA
- 51789 AGAAGAACCGCTAGTATGGGTAATCCCTCCAAGAAACCAAGCCCCAGTACTCAGAAGA
AGAAATAGAATGGGAAACCTCATGAGGACGTAGTTTCTCTCAGGATGGCTAGCCACCA
AAGAAGGAAAAATACTTTGCTCTGAGCTAACCAATGGAATTAATTAACCCCTTCACT
TAGGCATTGATAGACCCATCAGATGGCCAAATCATTATTTACTGGACCAGGCCCTTTTCA
AAACTATGAAGCAGATAGTCAGAGCCTGTGAAGTGTGCCAAAAAATAATCCCTGCACTT
[C,T]
AGGCCATGCATTTCAATCCCTGAATCTTTAACTCCTTGTAAAGTTTGTCTCTTACAGAA
TTGAAAGCTGTAAGCTACAAATGGTTCTTCAAATGGATCCCCAGATGCAGTCTATGACTC
AAATCTACCGCGGACCTTGGACCGGCTGCTAGTCCATGCTTGCATGTTGATGATATCA
AAGGCACCCCTCCCGAGGAAATCTCAAGTGATGACCCTTAGTTGCACCAAGTTCAAGCAGG
AAGCAGTTAGAGCGGCGGTTGGCAACCTCCCAATAGTACTTGGGTTTTCTGTTGAGA

FIGURE 3-47

- 52042 GATAGTCAGAGCCTGTGAAGTGTGCCAAAAATAATCCCTGCACTTCAGGCCATGCATT
TCAATCCCTGAATCTTTAACCTCCTTGTAAAGTTTGTCTCTTACAGAATTGAAGCTGTAA
AGCTACAAATGGTTCTTCAAATGGATCCCGAGATGCAGTCTATGACTCAAATCTACCGCG
GACCCCTTGGACCGGCTGCTAGTCCATGCTTCGATGTTGATGATATCAAAGGCACCCCTC
CCGAGGAAATCTCAAGTGCATGACCCTTAGTTGCACCAAGTTCAGCAGGAAGCAGTTAGAG
[C,T]
GGCGTTGGCCAACTCCCAATAGTACTTGGGTTTCTCTGTGAGAGGGGTGCTGAGA
GACAGGACTAGCTGGATTTCTAGGCGGACTAAGAATCCCTAAGCCTAGCTGGGAAGGTG
ACTGCATCCACCTTTAAACACGGGGCTTGCAACGTAGCTCACACCGACCAATGAGGTAG
TAAAGAGAGCTCACTAAAATGCTAATTAGGCAAAAACAGGAAGTAAAGAAATAGCCAATC
ATCTATCACTGAGAGCACAGGGGGAGGACAATGATCAGGATATAAACCAGGCGTTCT
- 52139 CTCTTACAGAATTGAAGCTGTAAAGCTACAAATGGTTCTTCAAATGGATCCCGAGATGCA
GTCTATGACTCAAATCTACCGCGGACCCCTTGGACCGGCTGCTAGTCCATGCTTCGATGT
TGATGATATCAAAGGCACCCCTCCCGAGGAAATCTCAAGTGCATGACCCCTAGTTGCACC
AGTTTCAGCAGGAAGCAGTTAGAGCGGCGGTTGGCCAACTCCCAATAGTACTTGGGTTT
TCCTGTTGAGAGGGGTTGCTGAGAGACAGGACTAGCTGGATTTCTAGGCGGACTAAGAA
[T,C]
CCCTAAGCCTAGCTGGGAAGGTGACTGCATCCACCTTTAAACACGGGGCTTGCAACGTAG
CTCACACCGGACCAATGAGGTAGTAAAGAGAGCTCACTAAAATGCTAATTAGGCAAAAAC
AGGAAGTAAAGAAATAGCCAATCATCTATCACTGAGAGCACAGGGGGAGGACAATGAT
CAGGATATAAACCAGGCGTTCTAGCGGGCAACGGCTACCCCTCTTTGGGTACCCCTCCCTT
TGATGGGAGCTCTGTTTTCACTCTATTAAATCTTGCAACTGCACAAAAACCAACCAAA
- 53089 GATAAGTGAATCTTCAGAGAACTGGCCTTGAGCCAGCTCTACAACCTAACAGCTCTGTGG
CCCTTTGGAGAATTTCTTAATATTGTAAACCTCAGCTTTCTACCAGTGAAATGAAGTT
AGTCCTCCCTGTCTGCAAGGTTGCTGCAAGGATTTAAACAATGTATGTACAAACCA
CTTAGTCTGTGCTTGGCCTATTGGTGCTTTTTTTTTCTTTTTTTAAGACAGGGTC
TTGCTTGAATCTTGCTGAGGCTGGATTCAAACCTCGGGGCTCAAGTGATCCTCTGCTC
[A,C]
GCCTTCCAAGTAGCTGGGACTACAGGCCTGCACCACTGTGCCTGGTGGCAGTGCTCGTTG
AATGTTCTTTTTCTTAGTTCTCTCCTAGCTCTTCTGACAGTTTTGGGGCTTATGTATAT
AAGAAGGACTTGGTTGCCTCAGGGAGAGAGGATGCAGTAGAGTTACATAGCTCACCTCAC
ATCCTCCAAAAGCTGAATTCATAAGTAAACAAAGTGAGCATTTCACCCATACTTTACACA
AAGTCTAGAATATTATGGTGTCCATCAGGCTCACATACTGTGACCTTCTGAGATACTTT
- 53117 TGAGCCAGCTCTACAACCTAACAGCTCTGTGGCCCTTTGGAGAATTTCTTAATATTGTGA
AACCTCAGCTTTCTACCAGTGAAATGAAGTTAGTCCCTCCCTGTCTGCAGGGTTGCTGC
AAGGATTTAAACAATGTATATGTACAAACCACTTAGTCTGTGCTTGGCCTATTGGTG
CTTTTTTTTTCTTTTTTTAAGACAGGGTCTTGCTTGAATCTTGCTGAGGCTGGATTCT
AAACTCCGGGCTCAAGTGATCCTCTGCTCAGCCTTCCAAGTAGCTGGGACTACAGGC
[C,A]
TGACCACTGTGCCTGGTGGCAGTGCTCGTTGAATGTTCTTTTTCTTAGTTCTCTCTA
GCTCTTCTGACAGTTTTGGGGCTTATGTATATAAGAAGGACTTGGTTGCCTCAGGGAGAG
AGGATGCAGTAGAGTTACATAGCTCACCTCACATCCTCCAAAAGCTGAATTCATAAGTAA
ACAAAGTGAGCATTTCACCCATACTTTACACAAAGTCTAGAATATTATGGTGTCCATCA
GGCTCACATACTGTGACCTTCTGAGATACTTTTCCCTCTCCATTCCCTTCTCTCTCCT
- 53434 GTGGCAGTGCTCGTTGAATGTTCTTTTTCTTAGTTCTCTCCTAGCTCTTCTGACAGTTT
TGGGGCTTATGTATATAAGAAGGACTTGGTTGCCTCAGGGAGAGAGGATGCAGTAGAGTT
ACATAGCTCACCTCACATCCTCCAAAAGCTGAATTCATAAGTAAACAAAGTGAGCATTTC
ACCCATACTTTACACAAAGTCTAGAATATTATGGTGTCCATCAGGCTCACATACTGTGA
CCTTCTGAGATACTTTCCCTCTCCATTCCCTTCTCTCCTGCTGGCTTTTTTTTTT
[-,T,C]
TTCTTCTTTTTTTTTTTTTTTTTTACTGTGAAAAACAACCTATATACAGAATAGTACAA
AAACATACTGTATAGTTTGAAGAGTAATTATTAAAGTCTTATTAAAGAAACAATGCTCC
ATCCATGTACTGCAAAAGACATGACCTATTCTTTTTCTTCTTAATTTTTTCTTTTTT
TTTTTTATTTTGGCCCTTTTTAGATCTAGACCTGCAGAGATCTTGTTCTTTTTTTGAG
ACAGCATCTCGCTCTGTACACAGGCTGGAGTTCAAGTGGCGTGATCTGGGCTACTGCACC
- 55431 TAATTATTTTATTTTATTTTATTTGAGAGAGGGTCTTCTGTGTCCACCAAGGCTGGAGTG
CAGTAGTGAATCATGGTTCACTGCAACCTCACTTCCCGGGCTCCAGTGATCCTCCCGC
CTCAGCTCCCAAGTGGTTGGGACTACAGACATGTGCCACCAATCCAGCTAATTTTTTAA
ATTGTTTTTAAATAGAGGTAAGGGTCTCACTATGTTGCCTAGGCCAGTCTCGAATTCAGG
GGCTCAAGGGATCCTTTTTGCCTTGCTCCTCCAGAGTGCTCGGATTTAAGTTGGGAGCCAC
[T,G]
ATACCCACCCAAACATAATTCAATTATTTAATATTTACATGTTTTAGTATTCCTTTGATA
GGGATGTGATGTTTGGGTGAATAATAAGTAAATCAAAGACATATATTTGAAAATTATGT

FIGURE 3-48

- AGTTATTCTAAAAAATTAATTATTTACCTTTATTTTAGCAAAATCAGTGTGTAGCATAA
TCAAGATATTTTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTAAGATTAAA
AAATAAAATATAATAGGAACCAGTATAAACAAGTGAATTTAAATTTAAATGCAATACC
- 55905 AGCATAATCAAGATATTTTGGTATTCTAGTAACAAGATCTAGTCACAGTAATGATGTA
GATTAAAAAATAAAATATAATAGGAACCAGTATAAACAAGTGAATTTAAATTTAAATG
CAATACCAGCTGGGTGCGATGCCTCACGCCCTGTAATCCCAGCACTTTGGGAGGCCAAGGC
AGGCGGATCACCTGGGTGAGGAGTTCAAGACCAGCCTGACCAACATGAAAAACCCCAT
CTCTCCCAAAATACAAAATAAGTTGGGTGTGGTGGTGCATGCCCTGTAATCCCAGCTACT
[C,T]
GGGAGGCGGAGGCAGGAGAATCACTTGAACCAGGGAGGCAGAGGTTGTGATGAGCCGAGA
TCACACCATTTGCACTCCAGTTTGGGCAACAAGGGCAAACTCTGTCTCAAAAACAAAAAG
AAACAAAAACACAGTACCATTACATTAGCACCCCTCAAAATGAAATACTTAGGTATAA
ATCCAGCAAAATAGGTATAAGAGATATATAAGTAAACTATAAAGCTCTGATGAAAGAAA
TAAAGAACCAATAAATGGACAGATATTCCATGTTTCATGGATAGGAAGACTCAGTAATG
- 60567 TAAATATGACATTAAAGCACAAACAACAATAAGATTAATTGGACTTCATCAAAAT
TAAACCTCTGTGCTTCAAAGGGCACACCAAGAAAGTGAAAAAGAAATCCACACAAATGGG
AGATAATTTTTTGCAATCATGTATTTACAAGACTGGTGTCCAGAATATATAAAGAAC
CTTGCAACTCAGCAATAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAA
TAGACATTTCTTCAAAGAAGACATATAAATCACCATGAGCATATGAAATGTACTCAAC
[C,T]
TCATTGGTCATTAGAGAAATGCAATAGAAAGTCACACCCATTAGGATGGCTAAATAAAA
AAAGATGAACAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTG
TGGATGGGAATGTAAATGGTGCGAGACACTTTGGAAAGTTGGCTATTCTCTCAGAGATTTA
CCACATGGCACAGCAATTTCTACTTTAGGTGTATACCCAAGACAATTTAAAAAGATATATA
CAGGCCGGGCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATC
- 60751 CAACTCAGCAATAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAATAGA
CATTTCTTCAAAGAAGACATATAAATCACCATGAGCATATGAAATGTACTCAACCTCA
TTGGTCATTAGAGAAATGCAATAGAAAGTCACACCCATTAGGATGGCTAAAAATAAAAAA
GATGAACAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTGTGG
ATGGGAATGTAAATGGTGACACACTTTGGAAAGTTGGCTATTCTCTCAGAGATTTACCA
[C,T]
ATGGCACAGCAATTTCTACTTTTAGGTGTATACCCAAGACAATTTAAAAAGATATATACAGG
CCGGCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATCAGGA
GGTCAGGAGATCGAGACCATCTCGCTAATACAGTGAAACCCCATCTCTACTAAAAATAC
AAAAAATTAGCTGGCGGTGGTGGGGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAG
GCAGGAGAATGTGTGAACCCGCGAGGCGGGCTTGCAGTGAGCCGAGATTGCGCCACTGCT
- 60755 TCAGCAATAAAAGACAAGTAACACAATTTAAAAATGTTGAAAGGATTTGAATAGACATT
TCTTCAAAGAAGACATATAAATCACCATGAGCATATGAAATGTACTCAACCTCATTGG
TCATTAGAGAAATGCAATAGAAAGTCACACCCATTAGGATGGCTAAAAATAAAAAAGATG
AACAAATAACAAATGTTGGCAAGTATGTGGAAAAATTAGAACCCTCATACACTGTGGATGG
GAATGTAAATGGTGACACACTTTGGAAAGTTGGCTATTCTCTCAGAGATTTACACATG
[G,A]
CACAGCAATTTCTACTTTTAGGTGTATACCCAAGACAATTTAAAAAGATATATACAGGCCGG
GCGCGGTGGCTCAAGCCTGTAATCCCAGCACTTTGGCCAAGGTGGGTGGATCAGGAGGT
AGGAGATCGAGACCATCTGGCTAATACAGTGAAACCCCATCTCTACTAAAAATACAAAA
AATTAGCTGGCGGTGGTGGGGGGCGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAG
GAGAAATGTGTGAACCCGCGAGGCGGGCTTGCAGTGAGCCGAGATTGCGCCACTGCACT
- 63301 TCTTTACAGAAGTTGGGCTGCTCCTGGTGGACAGTGTGTAAACAGTGAAACAATGTATGCTC
TAGACTGGGTTCCCTTCTCCACCCCTGTGTCTGTGTGGCCTTGGGCAAGTTGTTTAAACA
ACCACTTTTGCCTCAGTTCTTTATCGGAACAAGGAGAATAAGAATACTTCAATCAGGC
CAGGCGTGGTGACTCAGCCTGTAATCCCAGCCTTTGGGAGGCCGAGGTGGGTGGATCAC
CTGAGGTGAGGAGTTCCAGACCAGCCTGGCCAAATGGTGAAACCCCATCTCTCCTTTAC
[T,G]
TATGCTGGCCTGATATTGATCGTCCATGGTAGAATTGATACTGCTTGACAAAGCAGCCTA
TTTCAGTCAGGACCCCTCTTCTCTAGTTTCTCTGTAGCTATTACCTTAGCCTTCCATTT
CATCTTTCACACTACAGATACTCTCATTGATAAAGGAATGATGTCTTTATGCTTTCAAGC
ATTCTGGCAAGTTAGTAATTTCAACTATGATTCTAGGTGAGACAAAACCAAGTTATGAACAT
AAGATGTTTTTAATCTCTCCTCCCTGGTCCCCCAACCCCAACCCCAATCAGGAGAACTA
- 64573 CCTCACCACCCATTACTTTGTGTGACTTTGAGCAAGCTTTAAACGTCAGTGTCTCAGTT
TTGTCAACTGAGTAGATACCTCATAGAATTGCTGTTGATATTAAGTGACTTAATCCTATG
GGCTGAATTTGTCTCCCAAGTTTCTTTGTTGGAAACTTAATCCCCAGTGATGTGTTAA
GAAGTGGGACCTTTCAGAGTTGAATAGGCTATGAGGGCTCTGCCTCATGAATGGATTAA

FIGURE 3-49

- TGCCGTTGTTGCAGTAGTGGGTTCTTATAAAAGGAAGTGTGACCCCTTCTCTGCC
[T,A]
CCTCATGCATGTGATGGCCTTAGCCATGTTATAATGCAGTAGTAACGCCCTTACCAGACA
CTGGCTCCTTGATCTTGACTTCTCAGCCTCCAGAACTGTAAGAAATAAAAGTTTTTCT
TTATAAATTACCCAGTCTCTGGTATTCTGTTATGGCAGCAAAAACAGACTGAGACACTT
AATATATATGAAGCATCTAGACTGTCTGGCATTGTACATTTAAATCCAGATATCGA
TATCATCAATATCATCATCATCATCTGTGGCTGTATAATACCTCCCTCTGCATTTAA
- 76462 GCTCGGCTTTGGTCAGCTTCTTTGGTCTTATTTTCCCAAACAAAGAAACCTCTGGGTTAC
GGGCACCTGTTTACTOCTATCACCTGGCAGGATTTGCAGGATAATTGCCAGAACTAGA
ATATTGATCCAGATTTTACATCACCCATCCCTTTTGTTCCTCTGAGCTGCAGCTGATG
ATCACTGGTTGGTTTACAGAAATAAGCAGGGTTAGTCTAAATGCAGACAAAACCTTAA
AACAATAATGAGACTAGAATTTAATGAAAAGTGTATGATAAATTTTGAAACATAATTTT
[T,C]
CTCTCTCCAGTCTCTATTTTGTAAAAACAAATCATGATAGGACTGAGTCAATTTGCAGA
ATAAACTTTAGTCTTATATTTGGCCTGGTATTTGCATAAAGCACAGCAAGAATAATTAT
TTTTACACAGGCTTTTAAATTTGGCTTTGATGGAACCTCTGTTCCACAAGGAATTTGAGA
TAAGACCTTTTAAAGCTGAGCCAGCCATGGGTTTGTATCCTCAAATACCTATGAGTTGG
GTAAATTCCTCTCTTCTGAGGTCCCAAGATAACATGGGGTTCTGGGCTATTAGAAAG
- 77652 TCCCATAGCTGATTATAAACCATCTTTTGAAAAGGATCAAAATAAGACAATTGTCTGTGA
ATGACAAAATGTCTTTGGGTAATAACAGTCAAAGCCATGATTGACAAAGAAATTTGGTTA
TTTCTGAGCTTTACAATAACAACATAATAATTTTTTTTTTTTTTTTTTTTGTAGACGG
AGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGGGGATCTCGGCTCACTGCAAGCTC
CGCTCCGGGTTACACCATTTCTCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGC
[G,A]
CCCGCCACTACGCCCGGCTAATTTTTGTATTTTAGTAGAGACGGGTTTACCGTTTT
AGCCGGGATGGTCTCGATCTCTGACCTCGTGATCCGCCCGCTCGGCTCCCAAAGTGC
TGGGATTACAGGCGTGAGCCACCGCGCCCGGCAACATAATAATTTTAAATTACGATTGATA
GCATATACTCAGACATTAGAATTTAGAAACCTCATAGAATTTTGGAACATATGATTTT
TCATTAATAATATAACCTGAAGAAGATTAAACATTATTTTATTTTGGCAATCCACATAA
- 77819 TTTTTGAGACGGAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGCGGGATCTCGGC
TCACTGCAAGCTCCGCCCTCCGGGTTACACCATTTCTCTGCCTCAGCCTCCCAAGTAGC
TGGGACTACAGGCGCCCGCACTACGCCCGGCTAATTTTTTGTATTTTGTAGTAGAGACGG
GGTTTACCGTTTTAGCCGGGATGGTCTCGATCTCTGACCTCGTGATCCGCCCGCTCG
GCCTCCCAAAGTCTGGGATTACAGGCGTGAGCCACCGCGCCCGGCAACATAATAATTTT
[G,A,C,T]
ATTACGATTGATAGCATATACTCAGACATTAGAATTTTAGAAACCTCATAGAATTTTGA
ACATATGTATTTTTCATTAATAATATAACCTGAAGAAGATTAAACATTATTTTATTTTGG
CAATCCACATAACTAAACATGTCAATTAACTCTGTTTACCTCTCTTTTGGATGCTCAG
GAGCCCTCTGTAGTATTCAAAAGTAAAGGGTCAAGAAAGACAACCTTGAAACTGAAGTTT
GATTTTGGGAAGCCTGTTAAGTACATTAGAGGTTTAAACACTTTATATTATGAATACA
- 79594 TAGCTTTTATTTTCTTTCAGAAAATTTTGATCTAAGTGCTTATTTTCTCTAAGCCAA
TTAATTAGAGCTCTTTTATACAAACATCACACATATTGCACATATATACTACACAGA
CAGAGGATCCAGTAGTTGTAAGATTTTTCATTGTCCAATCTCTAATTAGATTACTGACC
TCAGGATGGAGCCCTTCAAGAGCAGGCTAGGAAAGCATGCAGTTTCTAGGGCTAATAA
ATAGTTATAGCTGGAAGACAAAACAGATTTTGAGAGGGATTTATCTGCTTTTAATTCCT
[T,C]
GGGTTTCATGAGGAAAACAGAGGTTTTTTCTAAATGGGGTCAGTGGTGCCCTCTCCAT
TTTTTCCAGGGAGTCCCAGGCCATCAGAAGTATCTTAGGGCTCTCATGGGTGCATTAA
GAGAGGCAAGACAAAATGGAGAAAAGTAATTCAGTTGACTGAAAAAGAAAATCTTTTTCC
AGTGAAACAAGATGCAAGAAGAGGAAAACATAGAGGCCTTTTAAATATGCCTATAGCTTG
GATATCCACTTTAATTAAGCTGACTTTTACCATAGTGCTTATTTTAAAAATCCTT
- 84331 ATTGACAAAAGAATCAAATGGGCCTGTTGAAGTGTTCATCTAGTGTCAAGGGAAAATTT
TTCCCACTGAATAAATTTTAAAGAAGCAGTCAAGACAAGAGCTATATTGATTATATC
CTGTTAGTGCTTATTCATAGACACATAAATCTGTAATTTTAAATATTGGTATAGAAGT
AGGTTGAAATCCACAGTAATTCACAGAACTGTGCAAGGGTTTTGTTTTCTTTCTTTT
CTTCTTTTTTTTTTTTTTTTGGAGACAGAATCTCACTCTGTCCCCAGGTTGGAGTAC
[A,T]
GTAGGATGAOCTCGGCTCACTGCAGCCTCCACCTGCCAAGGTTCAAGCAATCTTGTGOC
TCAGCCTCCTGAGTAGCTGGGATTACAGGCATGAGCCAACAGGGCGGCTAATTTTGTGTA
TTTTTAGTAGAGACGAGGTGTCTCCATGTTGGCCAGGCTGGTCTTGATCTGACCTCAGG
TGATCTGCCTGCCTTGATCTCCAAAGTGCTGGGATTACAGGTGTGAGCCACCATGCCCC
GCCAAGGCTTTTTTTCTTGAATAATCTTCACTCATATAAGCAGTATATGCAATATAAGG

FIGURE 3-50

- 86107 TCAAGACCAGCTTGAGTAGCAAAGTGAGACCCGTCTGTACAAAAGAAACACACACAAAA
GAAATATGACTGACTAAAATACATATAATTTTCATAATACTTTAAATGTAAGAAGGCAA
AAAAATTTCTGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGACCAGCCTGGG
CAACCTGGCAAAACCTTGTCTACAAAAAGTACAAAAATTAGCCAGGCATGGTGGTGCA
CACCTGTGGTTCTAGCTACTTGGAAGATTGAGGTGGGAAATTTGCTTGAGCCTGGGCTGT
[C,T]
GAGATCACAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGGCAGCGGAGTGAGACC
TTTTCTCAAAAAAAAAAAAAAAAAAGGCAAAAAATTAAATTATTAGTATGGTAAAGTTT
CGTTTGGACTTAATATGAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTTAAC
TTCTTTTGCTAAGAAAATAGAGTAGTATACTAGGAGACTTCCAGAGCTGCATAGAGCTTC
AGGGTCATCTACCAAGACAGACAATTTGTTGTTCATCATCAGTGTTAAACTCTAAATTATT
- 86175 ACTGACTAAAATACATATAATTTTCATAATACTTTAAATGTAAGAAGGCAAAAAATTC
TGGGCTCAAGGTGGGTGATCGCTTGAACCTAGGAGTTCAAGACCAGCCTGGGCAACCTGG
CAAAACCTTGTCTTACAAAAAGTACAAAAATTAGCCAGGCATGGTGGTGACACCTGTG
GTCTAGCTACTTGAAGATTGAGGTGGGAAATTTGCTTGAGCCTGGGCTGTGAGATCA
CAGTGAGCTGAGATTGCACCACTGCACTCCAGCCTGGGCAGCGGAGTGAGACCTTTCTC
[A,-]
AAAAAAAAAAAAAAAAAGGCAAAAAATTAAATTATTAGTATGGTAAAGTTTCGTTTGG
CTTAATATGAACTCATTTCTAGAAATGATGATCATTTGCATAGGGCTTAACCTCTTTG
CTAAGAAAAATAGAGTAGTATACTAGGAGACTTCCAGAGCTGCATAGAGCTTCAGGGTCAT
CTACCAAGACAGACAATTTGTTGTTCATCATCAGTGTTAAACTCTAAATTATTAGTGCTT
ATGTGCCAGATACTGAAGTTTATATACACTTTCTCTAATCTTTAATAATTCTAGAAAGGT
- 87109 AAAAGATTAACATATCTATGGTTTTATAAATGATTATAAAATAAATACCCAGTAACTAT
TATCCAGGTGAGCAAAATATTCTACTAGTGATGAGTCAATTTCCATGGCAAAAGAACTAA
GCTTAGGCACTATACTCAAAAAAATAAAAAATAAATTTTCTAAATGTGTATTATATCA
ATGGAATAAATACAAATATAACTTACCATGTCTAATTTCCCCCAACGCTTTCCCTCTTT
TACAGCATGGGTAGGTTCTCTCTCCATGGGGATGATTTTCTTTTGCTGCCAATAGTCAG
[C,T]
GTCTTCACAGACCTATTTGGTTGTGGGAAACAGCTGTGCTGGGTGCTGCTGTTGGATTT
GTTGGGCTCATGTCCAGTTCTTTTGTAAGGTAAGGACTTGGTTTTTTCATGTTGCTTTTT
AAAACTGTTAGATACCTTAAAGTTTTACTTTTCAGAACTATGCTATTTACAAGCAAAGA
TCCTCCTTTTCATTTTTTAAACTTTAAGCAATATGACTTATAAAACAACTGTTATCCA
TAGCAGCAAAATCAGAGCTTGAGAATTTGAATGCTTTTTTCTTGTAATGCCTAAGACTT
- 89444 ACTTATGTAATCTACTACCTAGTTTGTAAACAAAACACATACAAAGCAATGTTTTTCA
AATTTTCTGACCACTGAGCAATAAAAAATTATGACATATAATTTGATGTGACCCAGTTCT
GTCTCTCTTTCTCTACCTCTAAGTGAAACAAAATTTATTGAAACCAAAATTTCCCTTACT
ACATGTAATATTCTCATATATTCTATTAATTTGCTTATTTAGCTTGCTGATCAAAGGCT
ACTGAACTTGAGAGCAAGATACAGGAGCAAGGGGAAATGTGGTATAGATTCTGAGTGTC
[A,T]
AGTGGCAGGTCCATTTTTTCTCTAGCTCCAGTTCTGCTTCTGAGGAAAACCTTCTCCA
ACAACCTAGGTCAATCACACCAATGTCCCTTCTCTGAATCCTTTTGCACATATGATTGG
TATCCGACAGCCTTACTCATTTACATTGCACTTATTTGGCTGCCAAACGTCACAACTGG
AACCATGTGTTACTGAAGGGAAAACCTGGAAGTGAAGGGTTGAGCAGTAGTGCAATA
CCATCATAAAGCTCATATACTTCACTCTGCAGGAGGGAGAAGCTCTGTGGTTTTCCAAC
- 90535 TTTTTTTTTTTTTAAATAGAGATGGGTTTTGCTATGTTGCCAGACTGGTCTCAAGCCAT
CCTCCTGCCTTGGCCACCCAAAGTGTGGGATTACAGGTGTGAGCCACCAGTCTGGCCA
AGGACCAGATTTTTAATATTCTTTCCACAATGTATCTGGTACACAGTAGTTGCTTAATA
TGTTGGCTAAACAAAGAGTGAGATTTCAGTAAAGGGTGATCAGAGTGAGGTGAGATTAA
TTGGGAAAGCCTAGAAGTGATTCTTGAGCCTGATTGAAGGTGGTGCTAGCTGTGGATTA
[G,A,T,C]
TAGAGGGAGAAAGGCATCTCAGAGAGAGGATTGCCAATATGCCTTAATTTATCAGATTTC
TAGAGTTTCTTATGATTACCTCAGCATGTTGCTAGACTAGCATTATTATCCAAAATTTTA
ATTATTAAACCACTTTAATCTTACTTTCTAACAAATTGTTTGCTTTTACTACTGATAGCC
TTTTCAAAAACTTTAACTAGTTTATTCTCTTACCATAATTGTTTCAAAGAACATAATGA
TATGATCCTTTATCTCTAAGAAATGTGCAATTATTGGTTAAACTGTAAGATTATTTA
- 91163 GCCTTACAGCTTACAACTGGGATCACTAAAGGAATACACTTAATTTAAGTCTTTCTGTA
GTCAGAATATGATTTCTTGTGTCTTGCACAATACTGAGAACAGTGACGTACAGGGCGAA
GGTTGGTCTACAGCCCTTAGGCCAGCAAAACAGGCACAACTGCACCTCTGTGCAATGT
TCCTGACATAACCTTGGGGAATAATAAAATGCGGCTTTTCTTTTACTACCTTGTTT
GGTAAGTACCTGGAAAACTCCATGAAATAATTAGATTTTATAGTTAATTCTAACTTTTT
[T,A]
AAAAAATGTTTCATTGAGACTAGGTTTTTGGTTTGTTAATTGAATCACTGTTGATTTTAC
CCTTCTGGCACCAACCTTTATTTCTGAGCTGTGGAGAGCAGTTCTCACTCAGTGCTG

FIGURE 3-51

- TGTGCGTCACTGAAATCCACAGAAAGAGGTGGCTGAACAAAATCACTGATGACCTTAAT
GGTATTTTTTACATATTTAGATTAAATTAATAACGTTTAGTGCTACATGCTTGACTTA
CTGAGTTTTTCCCTCTATTTGGTTAATTTTTTTTTTTTTTGGTTAACTTTACTTGTAG
- 93488 CTACATCCTGATCTGATAGTCCATTTTCATACTATTAGGAAAGTATAGCCGAACCAACTT
AAGGTAAGTTTCTGGAATATAGATCTGTTGTGACAGGATTAACCTTACCATCCAACCTC
TTTCATAGCTTCTGTAGTCAAGAGAATTTATTTGTGCTCTTCTTAAAAAGATGAGTAG
AAATTCCTTTCTTTTTTTTTCTTTTTCCAGACAGGGTCTTGTAAAGTTGCTCAGGCTGG
CTTCAAGCAACCCCTCTGCTCAGCTAGGATTACAGGTGCAAGCCACCACCCAGCTTT
[A, -]
AAAAAAAATTTCTCTTTGGTACTACCACATGAACACACCTAGAGAAATCATAACTCAGCT
TTGCTAATACTAGACATTTACCAAAGGAAAAGTGGTAGATGACTGTCTAGTTATTTTTGG
TTATATATTTATAATTTGTAAATTAATTTACATATATTACTTCATTTGACTTTCACAAT
AAACCAGTAAAGCAGATAAAATAATATTAGCTCCAATTTACAGACTGAAAAACAGATC
TATTGTTAATAGAGACGTTAAGTGATTTTCCAAGAATTACATGTGAGTAAACAGCAGAGC
- 96065 GCATAAAAAATGGGAGTTATTTAATGTAAGGCAATGTGATTGCCAACTTGAGATAGAAGT
AAATTTTGAAAGGAGAAAGATAATACCCATTTGGAAAAGTGGTTTTAAAAAGTTTCATAG
CATTGGAGTTGGGGCTTGAGCATGAGATTTTGTGTACAAATCTGATCTTTGATCAACTAG
GGAACTAACTTACCAGTTTAGGTCTTGAAGATTGAGAAATACAATGGAGTGCTCTCATT
GCTATGTTAAAAATCTAAGATCTTATTAGATTGTACATGATGATTTGAGAGAGAATATG
[T, C]
ATGCTTGCTTTCAAAGTGAGGTTGGAGGTTTGTCTTCTCGTAGTTGACGTTTCAAAAAG
AAGAATTAGATTGCTCTCTGGAAGCTAAATTTACCTTTCTTTTAGGCTTCCCACCTTAAA
ATCTTTTTTGAAGGATACAAATCTTATAGATCAATTTAGATGAGGCTAACTTTCTAAA
AAGCATCTCTAGTAGCAGTGCATCAGTTTTTATGAATTGCCCTTTTGCTGAGAGTTG
TTTTGTTTTGTTTTCTGGAATCTTTTTTGTTTTGTTTTGTTTTGTCTTTGTTTTGTTTT
- 96351 TGAGAGAGAATATGTATGCTTGCTTTCAAAGTGAGGTTGGAGGTTTGTCTTCTCGTAGT
TGACGTTTCAAAAAGAAGAATTAGATTGCTCTCTGGAAGCTAAATTTACCTTTCTTTTAG
GCTTCCCACCTTAAAATCTTTTTTGAAGGATACAAATCTTATAGATCAATTTAGATGAG
GCTAACTTTCTAAAAACGATTCTAGTAGCAGCTGCATCAGTTTTTATGAATTGCCCT
TTTGCTGAGAGTTGTTTTGTTTTGTTTTCTGGAATCTTTTTTGTTTTGTTTTGTTTTGT
[C, T, G, A]
TTTTTTTTTGTTTTTCTGTTTTTTTTTGAAGCGGAGTCTTGCTCTGCTCTCCAGGCTGGAGT
GCAGTGGTGAATCCCGGCTCACTGCAACCTCTACTTCCCGGATTCAAGTGATTCTCTG
CCTCAACCTCCCTAGTAGCTGGGATTACAGGCGGCTGCCACCACACCTGACTTAATTTTT
TGTATTTTTAGTAGAGACAGGGTTTTGCCACATTGGCCAGGCTGGTCCCGAACTCTTGAC
CTCAGGTGATCCACCATCTTGCTCCCAAAATGCTGGGATTACGGGTGTGAGCCACCA
- 96701 CAGGCTGGAGTGCAAGTGGTGAATCCCGGCTCACTGCAACCTCTACTTCCCGGATTCAAG
TGATTCTCTGCTCAACCTCCCTAGTAGCTGGGATTACAGGCGGCTGCCACCACACCTG
ACTTAATTTTTTGTATTTTTTAGTAGAGACAGGGTTTTGCCACATTGGCCAGGCTGGTCCC
GAATCTCTGACCTCAGGTGATCCACCATCTTGCCCTCCCAAAATGCTGGGATTACGGGT
GTGAGCCACCACGCTGGCTCTGGGTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
[T, C, A]
ACGGCTCTCTGACTCTCTCATTTAGCTTTTCAAGGAGCATAACTCTCTTGGTTTTCTGC
CTACCTCCACATCACTCTCTTAGTTTCTTTTGTCTCACTTCTTCTTTTTCCCACTGACCC
CTGAATATCAGCATGCTTAGGGCTTGTCCCTGATCTTTTTCTCCATGTATTCTACTGG
TGGTTTTCATCCAGTCTCCTAAGTTCATACATCACGTATATGTCAATGACTTCAAATTTAT
AATTCCTGGTCCAGACCTTTTCCCTGAATCTCCACCAGAGCTGTATATCCAGCTGCTTAC
- 96879 CCGAACTCCTGACCTCAGGTGATCCACCATCTTGCCCTCCCAAAATGCTGGGATTACGG
GTGTGAGCCACCACGCTGGCTCTGGGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTAAGGCTCCTCTGACTCCTCTCATTTAGCTTTCAAGGAGCATAACTCTCTTGGTTTTCT
TGCTACCTCCACATCACTCTCTTAGTTTCTTTGTCTCACTTCTTTTTCCCACTGA
CCCTGAATATCAGCATGTCTAGGGCTTGTCCCTGATCTTTTTCTCCATGTATTCTAC
[T, -]
GGTGGTTTCATCCAGTCTCCTAAGTTCATACATCACGTATATGTCAATGACTTCAAATTT
ATAATTTCTGGTCCAGACCTTTTCCCTGAATCCTCCACCAGAGCTGTATATCCAGCTGCTT
ACTTAACATCTCCACTTGGGTAAGTGTCTAGGTGTTTCAAGACTTACCCTGTCTAAOCTGA
GGTCTTGATCTTACCCCTTAAAACTTACTCTGCCCCAGCCATCCTCATCTCAGGAGCTG
GCAATTCGGCCCTTTCAGTTGATCAGACTCAAACTTTGGAGTCATCCTTGGCTCTTCTT
- 97648 TTCTTCTCTGCCCCGGGAGTTTGTCTCTATGAAGAAGCCACAGGCACTTCTTTCTAAA
CATAAGTCACTCTGCTCAGAATCCTTCAATGGCTTCCATTTCCCTAAGAGTAATAACCA
ATATCCTTACAGTGACCTACAAGGTCTTCAAACTTGGCCCCCACTACCTCTCCAGCT
TCCATCGCTGTCCCTTGGCCACTCTGCTTCTGCCATTGCGCTTTAATGGGGCTCACTCT

FIGURE 3-52

- GACTACCTGCTTGAAACTTCCTGCGTCCCTTTTCCCTGAGTATTCACAAACCGCTCCTA
 [G,T]
 TACTCCTTTTCTTTTTTTGTAGCACTTAATACTTTCTAACATTATCTATTTACTTCTTT
 ATTGTAGTCATTGCTTACTATCCGTATATTTACACGCTCTGCTAGAATGTAACACCACAA
 GGGTAAGGATCTATTTCAATTCAGTGGTAGATCCCAAGCATCTAGCACAGTGCCTAGCACA
 CACTGGGTGCTCAAATATTTGTTGAATGACTAAATATATTCTGGGTGAGTCTGAAGTGAC
 ACTGTATAAGTAATGTTCAATTTTTCATCATTTGGATCTTTAAATTTCTCTACTTTGATG
- 97814 TACCTCTCCGAGCTTCCATCGCTGTCCCTTGCCCACTCTGCTTCTGCCATTCCGCTTTTA
 ATGGGGCTCACTCTGACTACCTGCTTGAAACTTCCTGCGTCCCTTTTCCCTGAGTATTC
 ACAAACCGCTCCTAGTACTCCTTTTCTTTTTTTGTAGCACTTAATACTTTCTAACATTAT
 CTATTTTACTTCTTTATTGTAGTCATTGCTTACTATCCGTATATTTACACGCTCTGCTAGA
 ATGTAACACCACAAAGGGTAAGGATCTATTTCAATTCAGTGGTAGATCCCAAGCATCTAGC
 [A,G]
 CAGTGCTAGCACACACTGGGTGCTCAAATATTTGTTGAATGACTAAATATATTCTGGGT
 GAGCTGAAGTGACACTGTATAAGTAATGTTCAATTTTTCATCATTTGGATCTTTAAAT
 TCTCTACTTTGATGCTATAATGATTTTTCACATTCTGTACTTGACGACATGGTGTTATT
 AATATTTATTCAATACTTATTCAACAAATAAGCTCAAACCTAAGGAAACCTCGGAATAATT
 GAGTAACCAAGTAATGCTGTCCGTTGATGGAGGAGAGAGTTGGTGTGTTTGTCTGATTC
- 98430 GAAATTTTAAGATAAATAGAAGAAATTTCTGGTCCCTCAAGTAACGTGTCTTCAGTACC
 CACTGAAAAATCTCAAAGAGTCTGGAGTGGTGTGTTTAAAGATAGGATGCAGGATGCAGA
 ACCATAACCAGGCTCAGGCTCTGCATAGCTTTGGTGGAGCATTGAGCATAGGGCTCGTG
 AGATAACTGATAAATGCCAAATATGACAATGATAAATGCCAAATATGACAATGATAAATG
 CGAAGAAATGACAGTGACAATGATAATGAAGTTACCAAAATGATGGTAACCTTTTCTCAT
 [C,T]
 GGCATGAAATGCTCTATCTCCAATCTGAAGCTGATGATGAGTTTCAGTTACTCTCATCT
 CTCTCCCTGCTACTCAGATTGAAAATCAGCTACTTAGTACCTGTGTCTTTGACTCTAG
 ACCATATCATTTGGTCAAATTTCAAGTTTAAATTTTAGATCCACATGGTCTCTGTCAA
 GAAGATGACTGACTCATATTGAAATCTGTAAATATGTATTCAATTAGCCTGTTTTTAA
 AACTCCCTTATAAGTGGGTGACTTTGTGGCAGATAGTAATTGACTGTTCTCAAAGAAA
- 101268 CTTGTAGTCACTAACTCTAAGGATCATAGAGCATAAGGGTAAGCAGGCTTCTTATGTAT
 TCATGCTATCAGGAAGGGTCTTTAGCACCCAAACAAAGTTCTAGGGGCTGTACATTGCTG
 ATGTGTTAAACCTCAGCTGCCCATGTAGCATCTATTTACCCCTATGCTTTCCCACTTTT
 TATCCCTATCATATATCTCTGGCTCTTTTGGCCCTCTCTCCTTGGGCAGCTTACTTGTA
 ATTAGAAAGTTTATATCCCTCATAACATATTGTAAGGAGTCTCATTTAAAGGGCAATGC
 [A,G]
 CACCAAATTTGGAGGTGTATAATTGCAAAACATGGAATCCCTATATCTCTGTTATGCAATCC
 CTGATCTCTGTATCCATGTTAAATTTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
 CAGTGGCAACATCTAGTCTTCAGAGCATAGTTAAGATTTTGGCCCAATCTCCAACCCA
 TGCAATGGTGTGCTTTGAAAACCAAGGTTCTTTTAGACAAATACAACATTTATTTCCC
 GCATTTCTTTTGTATTAACATTTTAGTTAACATTTTATTAACATTTTAGTCTACAAGA
- 103881 ATGTAAGAGATGGTAAGAGACAACCTTTGGCCAGTCAGGGACAACCTCATTGAAAAGCTG
 ATAGTAAGTACATCCTTTGGGTAAAGGGTAGTATAAGGTACTTTGAAGGTACAAAAATAA
 GACAGCTTTCTATTGCCCTTTGGGAGGCTATAACAGAATTTCTCAAGTCTCTAAGGCCAA
 TCAAGAGTTGGATTTTATCCAACCTATTTTAAATGATGATTTATTAATAATCTGCA
 TATCAAAATGAAATGCTTGCATACCTTTGCTGTAGGACCAATCATTTGTTTTTCTTC
 [A,G]
 TATACTGCATTAATCTGTTTTCAACTGCTAATAAAGACTTACCTGAGACCAGGTAATTT
 AGGAAGAAAAAGAGGTTTAAATGGACTTAAAGTTCCACATGGCTGGGTAGGCTTCACAGTC
 ATGGTGGAAGATGGAGGAGGATCAAAGGCATGCTTACATGGTGGCAGGCAGGGGAGTAT
 GTGCAGGGGAACCTGCCCTTTATAAAACCATCAGATCAGATGAGACTTATCACTGTCAAG
 AGAATAGCACAAGAAAAACCTGTCCCATGATTTAATTACCTCCCACAGCTTGTCTCCA
- 103926 CTCATTGAAAAGCTGATAGTAAGTACATCCTTTGGGTAAAGGGTAGTATAAGGTACTTTG
 AACGTACAAAAATAAGACAGCTTTCTATTGCCCTTGGGAGGCTATAACAGAATTTCTCA
 AGTCTCTAAGGCCAATCAAGAGTTGGATTTTATCCAACCTATTTTAAATGATGAT
 TATTAATAATCTGCATATCAAAATGAAATGCTTGCATACCTTTGCTGTAGGACCAAT
 CATTTGTTTTTCTTCATATACTGCATTAATCTGTTTTCAACTGCTAATAAAGACTTACC
 [C,T]
 GAGACCAGGTAATTTAGGAAGAAAAAGAGGTTTAAATGGACTTAAAGTTCCACATGGCTGG
 GTAGGCTTCACAGTCATGGTGGAGATGGAGGAGGATCAAAGGCATGCTTACATGGTGG
 CAGGCAGGGGAGTATGTGCAGGGGAACCTGCCCTTTATAAAACCATCAGATCAGATGAGAC
 TTATTCAGTGTCAAGAGAATAGCACAAGAAAAACCTGTCCCATGATTTAATTACCTCCC
 ACCAGCTTGTCCCATGATATGTGGGGATTATGGGAGCTACAATTCAGATGAAATTTGG

FIGURE 3-53

- 107845 ACCTTCTCTGCTTCACTTTGTCCCTACTTTTCTCAGATTTTTCATGATGTCTATGC
TTTTCTGTGTTTTTCTAGCTTTTCTAACTTGCAATTATTTTCTTTCAGATCTCAACAT
CTGCTGCAATTTGACTGTTCAAGTTAGTGACAATTTGCCATTTATCAGTTTGTGCTT
AGGCAGTATTCACCAGCATTTCTCTACTTGAGATGAATAAGGATCTTTATTTATCTGACC
ACTTGTTTACTCATTCATGGGGACATTTAATTTTACAGAACCTTTTCATCAAAAACAGC
[C,T]
TGTTTTTCTTTTCAAATATAATATACTAGCATAGGAACCTTGACAGAAGAGGTAATAAT
ACAGAAGAAATCTAGAGAACTGATCATGGAGAAATAATTAACCTAAAACAAAGCTGCTGC
TTATAGTAAGGTAGACCAAGTTTGTCTGTGTTCCAAATTATACTTAGCCAAAAATAAAT
ATTTATAGATAATTGAATAGTAGTTTTGTAGAAATGATTCATGGATTACTCAGGGGTGAA
ATTATCCCTGTAATGTAGGCCCAAACTTCTAAATATTTATAATTTGTGAGGGAGAAAT
- 109010 AGGTTTAAACCTTAAATAATAGAAATAAAAGTGATTTTATAATTATCTAGAGTAGTTTCA
ATGTGAAATAACTTAAAGGTATGGAAATGGATGCCAAGAAGTATAGTCAGTCTTGCTGGA
GTAAATAATGCCAGTGCTTTGTGCTTCTCCAGCTGCTGCTTCCAGAAGAACGGGGT
GTCTGAGTGTGAACATCACCAACAAGTAGGTAAACAGATATCCACGCCCTCTTGACCC
ACATACATATCAGTGGGATTTAGAAATGCTGCCACATATTGATGATTGAATTTATGAAGCA
[-,T]
ATAATATCCTCAATAATAAACCAAGTGCTCCCTGTCCCACTTGTATCTCTGCTTCTGTG
AACACATGTTTTCTTTTATATGCTCCTTACTCCTCAGGTGCTCTCTCAGGGACTTTTCAG
TTCTTGACCTTGCTCTTTTCTCAGCATTTTCTCAGAGGACAATTTCTAGCTTCTGTGATT
CCTCAAGCATTAATTGCTTTTCTGCCAGATATTTCTTGCTAGGCTCTTGAGCCCTCA
GAGCTGTTCTGAATTATGCAAGTGGGAATTGCCAGGATTAGGAATCACCTAATGTCCCA
- 109623 CCTGTGAGGCACCTTCTCAACTCTGCATCCCTTATACCTTCACAGCAACCTGTGTACCC
AAAGCAGTGTCTACTCGGTGCTCCTTTTCTCTCTGAAATAAAATTCCTAGATAAGAA
GACCTCTATATTCAGGCCTTGTCTTTGATTTTAGGGAAAAAAGAAAACTACCTATAT
ACATAATGTTTTTAAAAATCAGTAATGTCCCACTCGTTACAGAAAGGAGAAATAAAGAA
GTAAGTTAATGCCCTGGGATACGTGCTACAACATGGATGAACCATGAGGACATTACACCA
[G,A,C,T]
TGAAATACTCCAGGCACAAAAGCACGAATACTGTATGGTTCCGCTTAGATGAGGTACCCA
GAGAAGTCACATTCTAAATACTGAAAGTTGTATGGTGGTTTCCAAGGGGAGGGGGAAT
GAGGAGTTATTTAATGGGCACAGAGTTTCACTTGTAGAGGAGGTGGTGACAGTTGTACAA
CAATGTAATGTACTTAATATAGTACACTTAAATGGTTTAAATGGCAAATTTTATGAAA
TAGGAATTTATCACGATAAAAAATTAAGAAAGTAAAGAAAGTACTGCTTGGCGAAAGTA
- 110188 TAAAAAGTAAGAAAAGTTACTGCTTGGGCGAAAGTATATCAAAAAATAAAAAATAGTCCC
CACAAATTTCCAAAACAACCTAATGAGGTGTTGCTGCTAAATGGTGAACCAAATTTGTG
AACCAATGTGTAGTGTGTGAGACTGGGAACTGATGCCAAGATTTTAGCCTCAATAAGG
AGTAGAGTTCTAATTTGACTCCAAAGACATTTCTTTCCCTACCATGCCAAGGCCATCTG
ATTTCCAGTCCAAAGAAGTTTCTCTCTGCTCTGTAGGCTGCTTAATCCAGAGTACACA
[A,T,C,G]
GCCCTCCATTTTCTTATCTGTCTCTCTACCCAGGGTGTGGTCTTTCTCTCTGAACACTG
ACTGTATAATTACCAGACAAAACATAATTAATAATAGGCAGTCCCTCTACATCCA
AGGTTCCACATCCTTGGATTCAACCAACCATGGATTGAAATATTTGGGGAAAAAATAA
CAATAAAAAACACTGGCTGGGCAGCATAGTGAGATGCCATCTCTACAAAAACATTAAA
ATATTAGCTGAGCATTCAGCACTTTGGGAGGCTGAGGCAGGCAGATCACCTGAGGTGAG
- 111006 AAAAAATAAAATAAAATAAAATTAGCTGAGCATAGTGGCATGTGCCATGGTCCCAGCTA
CTTAGGGGGTTGAGGTGGCAGTGAGCTGTGATCGTCCACTGCACTCCAGCCTAGGCCAAC
AGCGAGACCCCATCTCAAAACAAAAACAATAAAACAGAACACAGATTAAAAACAAATAC
AGGCTGGGCTCACTGGCTTATGCTGTAAATCCAGAACTTTGAGAGGCCAAGGTGGGAGG
ATTGCTTGTGCTCAGGAGTTTATAGATCAGCCTGGGTAACACGGCAAGACCACATCTCTAC
[C,T,A]
AACAAACAACACAGGAGACTATACTTTTCAAGGACCATTTCTGGGGATCATAGTTTGTAC
TAGAGAAGTTTCTCTGTGTAGAGCATTGAAATATAAAATGCAGAATAATCATTTACATA
GCATTTACATTGTATTGGTTATTATAAGTAATCTAGAGATTAATTAAGTATACAGGAGG
ATATACATAGGTTACATGCAAAATACTACACCATTTTATATAGGGGACTTGATCATCCATA
GATACGGGTATCTGAGGAGGTGTTGGGTTCACTTCTCCAGGATACCAAGAGACTAATGT
- 111223 CTTTGAGAGGCCAAGGTGGGAGGATTGCTTGTGCTCAGGAGTTTATAGATCAGCCTGGGTA
ACACGGCAAGACCACATCTCTACAAACAACAACACAGGAGACTATACTTTCAAGGGACCA
TTTCTGGGGATCATAGTTTGTACTAGAGAAGTTTCTCTGTGTAGAGCATTGAAATATAA
AAATGCAGAATAATCATTTACATAGCATTTACATTGTATTGGTTATTATAAGTAATCTAG
AGATTAATTAAGTATACAGGAGGATATACATAGGTTACATGCAAAATACTACACCATTTT
[A,G]
TATAGGGGACTTGATCATCCATAGATACGGGTATCTGAGGAGGTGTTGGGTTCACTTCTC
CACGGATACCAAGAGACTAATGTTAATTTCTTTCCCAACCTCCACACCAGAACTCTGA

FIGURE 3-54

- AATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGGAAATGATA
ACAGTGGAAAGGAAAGCTGATCTAGGCCTACTCAACAAATTTAATCTTCATTCTGGTAAA
AACAAATTAGATTTATGGGTGCAAATTTGAGCCAGCAATTAGATGGCTCTTAGGATTAAT
- 111457 ATCTAGAGATTAATTAAGTATACAGGAGGATATACATAGGTTACATGCAAACTACTACAC
CATTTTATATAGGGGACTTGATCATOCATAGATACGGGTATCTGAGGAGGTGTGGGTTC
AGTTCTCCACGGATACCAAGAGACTAATGTTAATTTTCATTTCCCCAACCTCCACACCAGA
ACTCTGAAATAAGAATAAGAAAAGGAGCAGTTGGGATAGACAATATCAGAAGTATGTGGA
AATGATAACAGTGGAAAGGAAAGCTGATCTAGGCCTACTCAACAAATTTAATCTTCATTCT
[T,C]
GGTAAAAACAAATTAGATTTATGGGTGCAAATTTGAGCCAGCAATTAGATGGCTCTTAGG
ATTAATAAAAAAAGACTGAACATCATGCCTTCCAAAGACTGAGGGAAAGAGATAGATAGG
AGACTTTGGCAAAGTAGCACTTTAGCCAACATCATTAGCCTAAATCTTAGTGAAGAGAGG
TTAGAAGAAAGGTAGAAATTTTCATGGAAGGATCCATTTTCTTCACTTCAGAATTAAGGG
AAAAATTAGGAAGCTGAATAAGAACTAATGGCCTAATTTCTTTGTTTCTTTCAAAAATCA
- 112168 CAAGTTACCTCAGATCCCAGTGATTTAAATAATGCTTTCTGAATGTATCCTTTCTGT
TAAGAAGAAGCTGTATTAGGTTCTTGTGTTCTCTATAAAGAAATACCTGAGGCCGGATGAT
TTATAAAGAAAGAGGTTTAATTTGGCTCAGGATTTCTGCAGGCTGTATAGGAAGCATGGCC
CCAGCATCTGCTCAGTTTCTGGTGAGGTTCTCGGGAGCTTTTACTCATGGCGAAAGCAG
AGTGAAGCAGCAGGTCACCTTGATGAAATTGAGAGCAAGAGTATGGGTGGGAGCTGCCA
[T,C]
ACTCTTAACCCCAATCTCTAGTGAACACAAGCAATAACTCACTTATCACCAGGGAATGGT
GCTAAGCCACTTTGTGATGGATCCACCTCCAAATCCAGTCACTCCCAACAGGTCCACCC
TCCAAACATTGGGAATCATTTCACATGAGATATGGAAGGGACAAACATTCAAAACATA
TCAGAAGCCTATCTTAGGCTGGGCACGGTGGCTCACGCCTGTAATGCGAGCACTTTGAGA
GGCCGAGGCAGGCAGATCATTGAGGTGAGGATTTGAGACCAGCAGGGCAACATGGTG
- 112653 AAGCCTATCTTAGGCTGGGCAOGGTGGCTCACGCCTGTAATCGCAGCACTTTGAGAGGCC
GAGGCAGGCAGATCATTGAGGTGAGGATTTGAGACCAGCACGGGCAACATGGTGAAAC
CCCATCTCTACTAAAAATACAAAACTAGCTGGGCATGGTGGCACACACTGTAATCTCA
GCTACTCGGGAGGCTGAGGCAGGAAGCTCTCTTGAACCCGTGGGCAGAGGTTGCAAGTGA
CTGAGATTCTGCCACTGCACTCCAGTCTGGGCAACCGAGTGAGGCTCTGTCTAAAAAAA
[G,-]
AGAAGCCTATATTAACCTTATAAAATTTAATATCATTTCACCTAGCCTTTTGTGGGTGC
ATTTGTTCACTTTGGACTATTTTCCAAATTCATGTACAGTGTGATCTCTTAACAATG
AGGATATGTTCTGAGAAATGCATCCTTAGGCAATGTCTTGTGTGCAACATCATAGAG
TGTACTTAGACAACCCATACATGGTGTAGTCACTACATACCTAGGCTATATGGCATAGGTA
GAGCCTATTGCTCCTAGGCTACAAACCTGTACAGCATGTTACTGCACTGAATGCTGTAGG
- 114155 TAAAAATTTAAATAAACTAACAGATTAACCTTTTCATTGTTTCAGGAAGGAACAGAACAAAT
TTTTGATAAATTTGTGAAATATCTGGCACAGAAATTAATTTAGAGCCACTAAATAATTTCAA
ATTACCTAAAAATCCTAGTGATTTATTTCTATTTAAGATGAAGTCTACTTTAAACTTC
TAAATTCAGGGTTATTTAACTGGCATCTAAATCCAAGCTGGTTTGGTTGGTAATTC
TCTAGGACATTTACTAAATCTTGATCTTATCTAAATGATGCTATGTCATAGATGGACTG
[-,A,T]
TTGTTTGTGTTGTAATCCAGGGAAATTAACAAAAAACAAGTAGAAATAAAGGCT
TTTAAAGAATTTTAGAGTTAGAAATGTTTCAAATAGGTTCTTTAAACCATTAGCCA
TCTCTTCTTCTGAACCTCTCTTTTCTGCCCCTTTGGTAGCTATGAAATAATCTGCATT
CCAGAACTTCTTTTCCAGTCTCTTTTCATGTCTTAACAGTGCCATGCATGATTATC
TACACCATGGAAACCCATCTTAATGAAATGGAAGATCTGCTGTTTAAAAAACAAACAA
- 114181 AAACCTTTTCATTGTTTCAGGAAGGAACAGAACAAATTTTGATAAATTTGTGAAATATCTGGC
ACAGAAATTAATTTAGAGCCACTAAATAATTTCAAATACCTAAAAATCCTAGTGATTTAT
TTTCTATTTAAGATGAAGTCTACTTTAAACTTCTAAATGCAGGGTTATTTAACTGGC
ATCTAAATCCAAGCTGGTTTGGTTGGTAATTCCTCTAGGACATTTACTAAATCTTGAT
CTTATCTAAATGATGCTATGTCATAGATGGACTGTTTGTGTTGTTGTAATCCAGGGAA
[-,T]
TAAAAAACAAGTAGAAATAAAGGCTTTTAAAGAAATTTTAGAGTTAGAAAT
GTTTCAAATTAGGTTCTTTAAACCATTAGCCATCTCTTCTTCTGAACCTCTCTTTT
TCTGCCCTTTGGTAGCTATGAAATAATCTGCATTCCAGAACTCTTTTCCAGTCTCT
TTTTCATGTTTAAACAGTGCCATGCATGATTATCTACACCATGGAAACCCATCTTAATGA
AATGGAAGATCTGCTGTTTAAAAAACAAACAACCAATCACCCATGCTCTACAGTCC
- 114183 ACCTTTTCATTGTTTCAGGAAGGAACAGAACAAATTTTGATAAATTTGTGAAATATCTGGC
ACAGAAATTAATTTAGAGCCACTAAATAATTTCAAATACCTAAAAATCCTAGTGATTTAT
TCTATTTAAGATGAAGTCTACTTTAAACTTCTAAATGCAGGGTTATTTAACTGGCAT
CTAAATCCAAGCTGGTTTGGTTGGTAATTCCTCTAGGACATTTACTAAATCTTGATCT

FIGURE 3-55

- TATCTAAATGATGCTATGTCATAGATGGACTGTTTGT TTTGT TTTGTAATCCAGGGAATT
[A,T]
AAAAAAAAAAAAACAAGTAGAAATAAAGGCTTTTAAAGAATTTT TAGAGTTAGAAATGT
TTTCAAATTAGGTTCTTTAAACCATTAGCCATCTCTTCCTTCTGAACTCTTTCTTTTTC
TGCCCTTTGGTAGCTATGAAATAATCTGCATTCCAGAACTCTTTTTC CAGTCCTTT
TTTATGTCCTTAACAGTGCCATGCATGATTATCTACACCATGGAAACCCATCTTAATGAAA
TGGAAAGATCTGCTGTTTAAAAAAACAACAACCAATCACCCATGCCTCTACAGTCCTG
- 115964 GTAGAGGGGTTGTTTTGCTCAGTTCTGCCTAGAAGACAGTTGTAGTTATTTTAGTCCCAC
AGTCTCTACTCCTCCCTGGGCGCTGTTTTTGGCCCTGCTTTCTTGGCCTCTGTATACGGCCT
TTGTTAGCACTTTGTAGTTGTCTAGTCAGCTGTTACTCCAAGTCTCTGTGAGAAATAAAG
TTACTTTTGT TTTGAAGAGTCTCCAGTAATCCCCCTCTTTTAAACTATGACTCCCCAA
GATATATAGTCTAACTTGTGTGCACCAAGTATTTATCATATTTATTTAATAAATCCATA
[A,C]
ACCTTACATAAAAGATATTAAACAAAAAGTACTCACCCCTTAAAGGAGGAAGATAATG
ACCATCAAGGATGGCCAAATTACACAGTCTTAGGAAACAGTACAGTAGGTAATTATTGG
ACCTTTTGTATTAAATGGCATCCTTGCTTTGCAGGTGTGTACCACCACTGCCTTCACAGG
TTTCTGTAAATAAAGTGATTGGGGTTCCCTTCTGTTGAGCATTTCTTCTATCGTGAACCC
ATTTGGTGATGAGAAGCTTGAGTTTCTAATGCATGTTGTTGGCTTTATTGGAGCTGCTT
- 118100 GTGGTGGCTCATGCATTTAGGAAGCCGAAGCAGGCAGATCACTTGAGGTCAGGAGTTTT
GAGACCAGTCTGGCCAACTTGGTGAACCTTCATCTCTACTAAAAATACAAAAATTAGCTG
GGCGTGGTGGTGACACCTGTAAATCCAGCCACTCTGGAGGCTGAGGGAGGAGAATCGCT
TGAACCAGGTAGGTGGAGGTTGCAGTGAGCTGAGATCACCACTGCCTCCAGCCTGGG
CGACAGCGAAACCCCATCTCAAATAAATAAATAAATAAATAAATAAATAAATAAATAAAT
[-,A,G]
CCCCCTCTAGTTGAAAACTAAGTTCTCTACCTAAGCATAATTTGGATTTACCCAATTTAT
CTTCTTTCAAATACCTCAAACATTTACCTTATTATTCTTTTAAAGGATTACAAAGTAG
AGCAGGGGGGAAATAATAAACCACTAATAAAGAATAATAGCCATTTGACAGACAGGTGTT
CTTAGTTTTATAAAAAAAAGATGGCTGGTAGATTGAGTCTTTTATGAATACTAAAGAAAT
GCCTCTATTTTGT TTTGTTGGAGACAGGTTTCTTTGAACCTAACCTGGTGTCTCAGG
- 119631 GTAGGTAATAAGGTACAAAGATAGATTAGCAACAGATTACGGAGAGCTTTGAATACCAA
TCTAAGGAGTGTAAATGTAGGCAGTGGGCCACCTTTGAATAAGGAATTGATGAGATTAAA
GCCATATTTAGGAGGATTATTTCTGGACCAAGTATGAAACACAGAAGTTAGGGAAAACAGT
TAATAGTTTTGAAAGAGAGAGAAAAAGGAGATGGTGTGGGATACATAAATGGGCTTTT
AAAAATGCAAAATGAGAAGTGT TTTAAAGAGATATCACCCAGAAAGTCTATGCACTGCCAC
[A,G]
TGGGCACTATATGGGTGGTTGTATTTGGTGGGAAATTTGCTTGCAGACTTCAGAACTCA
GACCAATGTGTGGTGTGGGGACGGTGATTGTGAGGCATTATGGAAGGTCAAACAAAT
ATGCTCACTGGCTATCTATGGCCACAGGTCACTGTAGTCTCTGTTATAAGTACACTAAG
TGGAGGAGAAAGGTCTTTAAAAAAAAGAAAGCTAAAATTAATACCTGATTGTTATTAAAC
TGTGTGCCAAACACTGTTCTAAGCTCTTTACACAGACATTTATTTAATCTCGCAACCA
- 120833 CAGCCTCCGAGTAGCTGGGATTACAGGCATGCGTCACCAAGCCTGGCTAATTTTATAT
TTTTAGTAGAGATGAGGTTTTCAACAGTGTGGCCAGGCTGGTCTCGAACTCCGGCCTCAG
GTGATCCACCCACCTCGACCTCCCAAAATGCTGGGATTACAGGCGTGAGCCACCATGCCC
GGCCTTAAAAATGCTTTTAAAAATGAAACTAAACATGTTAATTTTTTTCAAATGTTTT
CATGAAAATTATCAGGACAAGTTTCATAAATATTGAAATTTGGAAAAAGTTGCAAGCC
[T,C]
ATAACATTGCAGAGAAGCAAATGCATTTGATGCAAAAGCCTCAAATTTGTCAAGTTTTTCT
ACCATATTCAGTGTGGTTTTCTTTCTCTTTGGCCTATAGATGAAACATGTAATGAAAGAT
TTCAAGATGAAAAAATAAAGAGGTTGTTCTCATGTGCAATGGCGTCACTTCAGGAGTTG
GACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGGTTATCTAC
AGGTACTTTTTTACACCTTTTTTCCCTATCAAAAATTACTCTATCACCCAAATGTCTCA
- 121125 TGCAAGCCTATAACATTGCAGAGAAGCAAATGCATTTGATGCAAAGCCTCAAATTTGTCA
AGTTTTTCTACCATATTCAAGTGTGGTTTTCTTTCTCTTTGGCCTATAGATGAAACATGTAA
ATGAAAGATTTCAAGATGAAAAAATAAAGAGGTTGTTCTCATGTGCAATGGCGTCACTTCAGGAGTTG
CAGGAGTTGGACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGG
TTTATCTACAGGTAATTTTTTACACCTTTTTTCCCTATCAAAAATTACTCTCATCACCC
[A,G]
ATGTCTCATTAATGTACTTACATGCTTAAATCTTTTTTTTTCTTTCTCTTTCTTTTTT
GAGATGGAGTTTCGCTCTTATTGCCCCAGGCTGGAGTGCAATGGCACGATCTCAGCTCTCC
GCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCTGCTTACGCTCCAGGTAAGTCTGGGA
TTACAGGCGTGTGCCACCAACACAGGCTAATTTTTGTATTTTTTAGTAGAGATGGGGTT
TCTCATGTGTGTCAGGCTGGTCTTGAACCTCTGACCTCAGGTGATCTGCCCGCTCGGC

FIGURE 3-56

- 121245 ATGAAAGATTTCAGATGAAAAAATAAGAGGTGTTCTCATGTGCATTGGCGTCACTT
CAGGAGTTGGACGACTGCTCTTTGGCCGGATTGCAGATTATGTGCCTGGTGTGAAGAAGG
TTATCTACAGGTAATTTTACACCTTTTCCCTATCAAAAATTACTCTCATCACCC
AATGTCTCATTAAATGTACTTACATGCTTAAATTCCTTTTTTCTTTCTTTCTTTT
TGAGATGGAGTTTCGCTCTTATTGCCAGGCTGGAGTGCAATGGCAAGATCTCAGCTCTC
[C,T]
GCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCTGCCTTAGCCTCCAGGTAGCTGGGA
TTACAGGCGTGTGCCACCACACAGGCTAATTTTGTATTTTGTAGTAGAGATGGGGT
TCTCCATGTTGGTCAGGCTGGTCTTGAACCTCTGACCTCAGGTGATCTGCCCGCTCGGC
CTCCCAAAGTGGCTTAAATTCCTCTATAAAAATGAGAAATATTTCTACAACATAACTTC
TATAGGCAGTTTTCAGGACAAAATTAGTTATTAGTTTGGGTTTAAACATGAGAAATT
- 121521 TGCAATGGCAGATCTCAGCTCTCCGCAACCTCCACCTCCCGGGTTCAAGGGATTCTCCT
GCCTTAGCCTCCAGGTAGCTGGGATTACAGGCGTGTGCCACCACACAGGCTAATTTTT
GTATTTTTTGTAGTAGAGATGGGGTTCTCCATGTTGGTCAGGCTGGTCTTGAACCTCTGA
CCTCAGGTGATCTGCCCGCTCGGCTCCCAAAGTGGCTTAAATTCCTCTATAAAAATGA
GAAATATTTCTACAACATAACTTCTATAGGCAGTTTTCAGGACAAAATTAGTTATTA
[G,A]
TTTGGGTTTTAAACATGAGAAATTGGCAATGAAACAACAATTTCTTTGTTTTGTCTGGGA
ACTCCACCAAAACAGAATGGTTTTTCATCCATTGCTTTTTCTATGAAGAATGTTTTTGGT
GTAGTTCTCATAGTCATGTGCAGATCCTGTGCCCTTTGCATGTCTTATGAAATTTGGTTG
TGTGTGTGACTTTTCACTCTCTTACTGCAAATTGCCCTCTCGTGTTTTGGGGTGAGCAT
AAACAAATGCTAATTCAGATCATTGCTGACAATCAACAGAACAGGTATTGAAGTGACT
- 124296 GCATGAAGTAAGTGGAGGACTAAGGAGATGGAAGGGAGTGGCCAGATAGGCAGGGGGAA
AACAGGGATGAGAGTGTCTTAGGGGAGGAGTGGTCAGCAGTGTCACTAGCTAGTGACA
AAGAGGCTGAAAGGTTTTTCATTGAATTTAGAATAGGGAGGCTATGAGTGAGCTTACAGAG
AATGGTTTTCTACAGGTGCAGAAAATTGATCATGATCATTGAACAAATGGAAATATAGAC
AACTTTGTCCAAATGCTTGGCTGTGGAAGGAAGGTAAGGCAAGCCACAAGGGGGGTCT
[C,T]
AGGTTTTGAGGATTAGCCTGTCTAATTATATTATACATGAGAGGCAGTATTTGAGCAGG
GCCTTGAAAAAGAGGTGAAATTTGGACACAGGAAAATGATTGGAAAAGGCATTACAGATA
AAGTTAACTTCCATTAAATGACTTGAAGTAATAACAGTCAACCATTTATTGAGGACTTTC
ATGTGCCAGACAATGAACTAAGGCTCTACATGCATTATCTCATTGATCCTTGCCCCAGC
CCTTTAAGAGAGAAGGTACCATTTGTTTCCACTTAGAGATGTGAACACTGAGGAAGT
- 124549 TGCTTGGCTGTGGAAGGAAGGTAAGGCAAGCCACAAGGGGGGGTCTTAGGTTTTGAGGA
TTAAGCCTGTCTAATTATATTATACATGAGAGGCAGTATTTGAGCAGGGCCTTGAAAAAG
AGGTGAAATTTGGACACAGGAAAATGATTGGAAAAGGCATTACAGATAAAGTTAACTTCC
ATTAATTGACTTGAAGTAATAACAGTCAACCATTTATTGAGGACTTTCATGTGCCAGACA
ATGAACTAAGGCTCTACATGCATTATCTCATTGATCCTTGCCCCAGCCCTTAAGAGAG
[G,A]
AGGTACCATTTGTTATTTCCACTTAGAGATGTGAACACTGAGGAACTGAGAGGCTACCTCA
CTGTGGGTGTCTGTGTATAGAGGTCCAGGCAGTCACAGGACAGTCTGGTCACACAGCT
AGAAGGAAGTGAAGAGAGTTGGTAATGTGCTGCTTTAAAAATGTATTTATTGTATCATG
ATCACTTTGTCACTACTTCACTGTGGACATCCTCATCTAACATTTAGTTTTGTTCTCTAG
TGTCAGGGAGCCCTTAATGGACATTTATTGCACTACAGACTTTCAGCTTTCATACATT
- 124858 TTGTTATTTCCACTTAGAGATGTGAACACTGAGGAACTGAGAGGCTACCTCACTGTGGGT
GTCTGTGTGTATAGAGGTCCAGGCAGTCACAGGACAGTCTGGTCACACAGCTAGAAGGAA
GTGAAGAGAGTTGGTAATGTGCTGCTTTTAAAAATGTATTTATTGTATCATGACTTT
GTCAGTACTTCACTGTGGACATCCTCATCTAACATTTAGTTTTGTTCTCTAGTGTCAAGG
GAGCCCTCTAATGGACATTTATTGCACTACAGACTTTCAGCTTTCATACATTCAAAAATT
[G,T]
AGTGCCCTCTGTGCCCCAAGCACCAGCTCAGATGCTGTTAGGGTGATGCAACAAGACAG
ACATGGTCCCTGAGTTCTTAAAGCAAGCCTGAGGCAGGAAGAAGCCGAATGTGTGTGGAA
ACCCAAGAAGATGGGAAAGTGGCATGGGAAGGCACTGGAAAGTTAGAGTGGGTGAGATT
AGACAGAGCCTTGAAAGCCAGGATGAAGAGACTTTGCTTTAAGAGTAGTGGATTTTGGCC
GGGCGCAGTGGTTCAAGCCTGTAACCCAGCACTTTGAGAGGCCAAGGCTGGCGGATCAC
- 125920 TACCCTAGATAGGGCAGACAGATTATCTGCAACATTTTGGAGCACATTTTAATACTGA
CTGTTTCCAGTAATTTACAAAAGAAAATATAGCCTTTCCCTAACTGTCCCATGTTGGTCT
GCAGTTACACAGCAGTAAGTTAAAAGTTAGTATTGGGGGTCAAATATTTCACTTTAGATG
AAAGTTTAGCCACAATCTGGCTTCTGTAGGCCCTTATCTAATTTTGCATCCAAATGTAG
AGCATGTTTTGTGGCACCAGTAGCACATGCTGAGTCACAGGTGTGACAGCTGCATTTCA
[A,T]
ACAAGCCTGAGAAGGAGAAAAGAACCCCTTCAGTGTGTCTGTGTTGCGAGGAGCCACT
CAAGGACTCCACCTTGTGAACACAGCGGCACAGGACGCAACACAGGCCTAACCCATGCAG

FIGURE 3-57

10/506513

- GATGCTGGACTCGTTCCCTTATTCACTACCTCCTCTCTCCTTTTTCATGGCTTCCTTG
CCCCAACATCCCAAAACACACAGTGTGGTTTTTGATTCTTGCTCTCTCTGCTGAGTTG
ACTCCAGCTCTGCTGTTGTTCTCTCTTTTCTCCATCCTGGCTCTCTGCTTTTGG
- 126266 TTGCGAGGAGCCACTCACGGACTCCACCTTGTGAACACAGCGGCACAGGACGCAACACAG
GCCTAACCCATGACGAGTGTGGACTCGTTCCCTTATTCACTACCTCCTCTCTCTCTTT
TTCATGGCTTCCTTGCCCCAACATCCCAAAACACACAGTGTGGTTTTTGATTCTTGCTCT
TCTCTGCTGAGTTGACTCCAGCTCTGCTGTTTGTTCCTTCTTTTCTCCATCCCTGG
CTCTCTGCTTTTGGCCCATCCTTAAGGCTTGAATGCTCCTGGGCTTACCTCTTTCC
[A,G]
TTCATTGGTGGTGTGTTTTCTCAGACATACCTGCTCCCTGCTTTCATCTTCAACTTCTT
GGGGCTGTGACAACTCTTCCCTCTTTGTCCCTTGAAGCCAGTTCTGAGTAGCAGCCAGG
CCTAGAACACTGGTGACACAGACACACTTCATAGCCCTCCCGCATGGTCTAGTTTCAGAT
CATGGTAATCCCTAGTCTAGGAGGCTGCCGAGCCCAAGAGCACAGGCTCTGGAGTGAGAA
GCCAGTTTACCCCACTTCTACCACTAATTGAGAATCAGCAGAGGGCTGTGGTGAGGATT
- 128258 TGATCAGAGGCTCCGTA CTAGTCTCATCTAGACTGTGGCACTGGGTGTGAACGTATCAA
ATGCATGTTTCTCCATCAGGCAGAGTGAAGTAACCATGTGCCATGGAGAAGGTTGACA
GACTCCCTGTGAAGCACTTGAAGTGACACTGGCCCTCTGTGTCTTCAAGAATCCAGC
CACCTGCTGTGTGGCTGACATTTCTTTAGTTTGTGATGGCCAGCAGAACTCTGTTG
CCAAGTGTTCGTCTGCTGGGTGCTAGCCAGAGGTTCTGAAAGTCTGGAGACTTATAT
[G,T]
GGCTAAACTTTAGGAACGTCAATTACATGTCTATCTCCAAGATGCCCTCTTTTATTTCAGG
TGCACTCATTTGTTTCTCTTGAGCTACACTTAAGATTCTTGAGCAAAACCTAACTGAC
ATTTCTCCAGCAATGCTCTCTTGAGATAGAAATGGGAAAGTAAGAGCAAAAGGAATCT
TTTGTCTCATGTGCATACACTAACTCATAGAAAGTTAATACTTCTATAGCCTGTACTAT
TATAACAAGTATTATATATTTATGATATATTTCTTAAAGAAAACAAAAGCAATATAGAC
- 130303 TTTATCTCCTTTTATGTTTGTACATAGAATAAAAAATGTTTCTATTGTTAAGAATATTAGA
GTTGGACGAGTGGCTACGCTATAATCCAGCACTTTGGGAGGCCAAAGCAAGTAGTT
TGTTTGAGCCCGGAGTTCAAGAATGGCTGGGCAACATAGTAAGACCCCATCTCTACAA
AAAAATAAAAAATTAGCCGGGCATAGTGGCATGTCCAGCTACTTGGGAGACTAAAGTGGG
AGGATCACTTTGAGCCCAAGAGGTTGAGGCTGCAGTGAGCTATGATCGCACTGCACT
[C,A]
CAGCCTGGGCAACAAAGTGAGACCTGTTTCAAAAAATAAAAAATTTGGGGTTTATCTACTTA
GATTTTCAATAAAAAATTACTACTTAAATCTTTACCTGCTTGTAAATTTCAAACCTTTTC
TACATTTTGATTTATCTTTAAATCTCTTTTGTCTCAATAAATGGGAAGTATCAGGAAGT
CTTTTACTTTGCTCAAGGTCTAGAGAGCTTAGAACCTGGTAGTGTCCCTCTGAGCCCCA
GTTCTTTCCAACTGCCAGGCTGTAGGCCCAACAATTACTACCACTAAGAAATTATGCT
- 130617 AAAGTGAGACCTGTTTCAAAAAATAAAAAATTTGGGGTTTATCTACTTAGATTTTCAATAAA
AATTACTACTTAAATCTTTACCTGCTTGTAAATTTCAAACCTTTTCTACATTTTGATTT
ATCTTTAAATCTCTTTTGTCTCAATAAATGGGAAGTATCAGGAAGTCTTTTACTTGCT
CAAGGTCTAGAGAGCTTAGAACCTGGTAGTGTCCCTCTGAGCCCCAGTTCTTTCCAACC
TGCCAGGCTGTAGGCCCAACAATTACTACCACTAAGAAATTATGCTTGTGCTGTCTG
[C,A]
AGTTGCATTGGAGAAAAGGATATTTAACTGGCAAAACAAAAGTCAGGAGAATGGGGAGATT
TTGTTCTTTTGAATGCTAGTGTGAAGTGTAGGCTATTTTCAAATGCCCACTCGTA
TTCTTTTCTTTTCTTTTCTTTTGTGAGAGGGAGTCTCACTGTGCCCCAGGCTGGAGTGC
AGTGGGGGATCTGGGCTCACTGCAAGCTCCGCTGCTGGGTTGAGGCCATTCTCCTGCC
TCAGCCTCCGAGTAACGGGACTACAGGCGCCACCACCGCCCGCTAACTTTTTTTT
- 130910 GTCATGGCAGTTGCATTGGAGAAAAGGATATTTAACTGGCAAAACAAAAGTCAGGAGAATG
GGGAGATTTTGTCTTTTGAATGCTAGTGTGAAGTGTAGGCTTATTTTCAAATGCC
AACTCGTATTCTTTCTTTCTTTTCTTTTGTGAGAGGGAGTCTCACTGTGCCCCAGGC
TGGAGTGAGTGGGGCGATCTCGGCTCACTGCAAGCTCCGCTGCTGGGTTGAGGCCATT
CTCCTGCCTCAGCCTCCAGTAACCTGGGACTACAGGCGCCACCACCGCCCGGCTAAC
[- , T]
TTTTTTTTTTTTTTTGTATTTTAGTAGAGACGGGTTTCACTGTGTAGCCAGGATGAT
CTTGATCTCCTGACCTCGTGATCCGCCCTCCTCAGCCTCCCAAACTGCTGGGATTACAGG
CGTGAGCCACCGCGCCGAGCCGCAACTCGTATTCTTAAACGAATCATATTTTACCAT
AAGACCATAGTTTAGTGATTGAAGAAAAATGTACCGAACTGTATGATATGATGGTGTCA
AAAAGAACTAACCAATATGAACAGTTTTCAGGAGCATGTTTCTATTTTGGTGTGCT
- 131727 TCCTCCCTAGCCTGACTGCTATTGGAGGGCACCTCCAGGCACAGTTCTGTTACAGCCT
GCTGCTGCCCGGTGGGCCATGGTTCCAGGACGGCTCCATCTTCTGTGCTTTGGGCACAT
TAACCTCTCCAGCGTCACTATCTTCATCAGCAAAATGGAGATAACATTAGTACCACCTC
ATAAAGTTGTTATGAGGATCACCAGTGAGATAATCAATCTAAAGTGCTTACAACAATGCT

FIGURE 3-58

- TGGCACTTGGTAAACACTAAATAAATGATAGTTGCTATTATATGCATACTTTTAAAAAC
[C,T]
TGATGCTTTTAAAAATTTTTCTGCTGACTAGTGAATTGTTTCAGTTTTTGTGTGTGTGT
TGTGTGTGTGTGTGTGTGTGAGACGGAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAGTGGC
ATGATCTCGGCTCACTGCAAGCTCCACCCCGGATTACGCCATTCTCCTGCCTTAGCC
TCCCGAGTAGCTGGGATTACAGGCGCCGGCCACACGCCCGGCTAATTTTTTGTATTTT
TAGTAAAGACGGGGTTTACCTTGTAGCCAGGATGGTCTCGATCTCCCGACCTCATGAT
- 132895 CAGGCTGGGAGGGAAATTAAATATATAAAAGTCATTTTCGGCCAGGCGCTGTGGCTCAT
GCCTGTAATCCAGCACTTTGGGAGGCGGGCAGGTGGATCACTTGAGGTCAAGGAGTTCA
AGACCAGCCTGCCCAACATGGGGAAGCCCATCTCTACTAAAAATACAAAAATTAGCTGG
ACTTTGTGGTGCTTGCCTGTAGTCCAGCTACTCAGGAGGCTTAGGCAGAAGAATTGCTT
GAACCTGGGAAGCGGAGGTTGTAATGAGCTGAGATCACCACTGCACTCCAGCCTGGGC
[G,A]
ACAGAGACAGACTCCAGCTCAAAAAACAATACGTTTTTTTAACTTGTCCCTTAATGGAAA
TATTGAGAAAATGTCTAGGGGAACCTGAAGGAGATGATTATAGGAGTTGATTATGTATGT
AAAAATCAAAGTGAATGAGGCAGTGGCAGGGGGGAAAGGGGGAACCAAGTAATGACTTAGAA
GTCTTAAGCATGTTGCATGGTAATTGTGACATTTGCTTCCTGCGAGCGGAGCTGACCTTG
TGGTGTCCGTCCTAGGTACTCTCCTTTTCTTCATTTGGTCTGATGTCCATGATGATTCT
- 133506 TCTTTGGGCGCCTCATTTGCTGTGTGCTCATGCGGTCTCTCGATGGATGCTTCATTT
CCATTATGGCTCCCATAGCCTTTGAGTTAGTTGGTGCCAGGATGTCTCCCAAGCAATTG
GATTTCTGCTCGGATTCATGTCTATACCCATGACTGTTGGCCCAACCATTCAGGTAAT
ATAATGATTTCCAGTAGTTATATTAATTCATAGTATTTCTACTTCAGGTCTTAATTAA
GTCTCATTTATATGTAACATATTACAGGTATTGATTACTGGTCTTTTGCTTTTATGT
[G,A]
TGCCTTACTGGTAACATTTTAAATAAGACTAGCTATTAAACAGTATGTTGAATTTGCTGA
AGAGTCCCTCTTATCCTTACTGGCAGCTAAAAACATATATAAAACACTTTGGGAGGCTGA
GGCGGAAGATCACCTGAGCTCAGGAGCTTGAGACCAGCCTGGACAACATAGTGAGACAC
TATCTCTACAAAAAATAAAAAATAAAAAATTAGCCAGGCGTGGTGGCATGTCATCTGCAG
TCCAGATGCACAGGAGGCTGAGGTGGGGGATTGCTTGAGCCAGAGGTCAAGGCTGCA
- 135473 ACACCACCACACAGCAACTGGCAGCAGAAAGCTGCTGGCTCACCAGGAGGCTCTGAGGCG
ATCATAGTATTACAGCAGAACATAATCATGAGTGTTCATAAGGAGGAAGAGTTCAAGGAAT
GGTCTGATTTCCAAAGATAGAAAACCTTGTCATTTACAGATATTGTCTATTTTATATATGC
AGAATGGATGTACACATTTTATGTGTGGTACTTAATTGGACAAATGGTCAGCTATTTA
TTTAACAATGTCAGATAGATATTTAGTACAGTATATCCCTGGACATTTTAGATAACTTA
[G,A]
GTTTTATAGTATAAGTTATAAGAGTTTAAAAACACTAAGATAACTTTTAAACCATGAGT
CCTGGAATTTGTTAGAGAAATTAGAAATGTTGAGTACCGTAAAAGTTTTCAGAAGCAGAA
CCCGAATATAGAATGCCATTAAATAATTCTTATATACTTACATTTTCTTCCAGGTACTTAT
AAACCTTAGTCTATTTCCAAAATGTATTTAAACACCTAACCTTCATCCAAATFATTAAT
TTAAAATTTTCTTAATTTGAATTATGATGTAAATAGTTTTCATGTTATTTATATAAAA
- 136201 GACAAAACCCCATCTCTACAAAAAATAAAAAATTAGCCAGGCATGGTAGCATGCACCTG
TAGTCCCAGCTACTCAAGAGGCTGAGCTGGGAGGATCAATTGAGCTTGGGAAGTCAAGGC
CTGCATGAGCCATGATTATGCTACCGCACTCCAGCCTGGGTGACACAGTGAGACCCGTGC
TCAAAAAAATAAAAAACGCTACCTTTCTATCTTTTCAAGTAATGTCTTGGTATGAAAAATC
CAGAGGACTGTACTTTATGACAACGTTAAAGATATGAGATCTTTTCTTCTATCAAAAA
[A,G]
GGTTTATATTTAGATCTGTTTCTTAAAAAATAAAGTCTGATGTCTGAGATGTCTG
AATCAGTCTGTGGCTGATCTAGACCCCTACAGAGCCACACTTGTCTCCCTTGGTGAC
AGCTTTTTCCTTCTCAGGGTTACTTGTGACAAACTGGGCTCCTATGATGTGGCATTCT
ACCTCGCTGGAGTCCCTCCCTTATTGGAGGTGCTGTGCTTTGTTTTATCCCGTGGATCC
ATAGTAAGAAGCAAAGAGAGATCAGTAAACCACTGGAAAAGAAAAGATGGAGAAAATGT
- 137080 TGGTATATGAAAAACATGTCTGAAAGTCACATATTGTGAAAAATTTGAAGCTATCTCAGTAA
AAAGCAGCTTTGGAACTGTGAATGATCTTTAGCTTGACAAATGTTTAAAAATACCTCA
GGCTATACTGAAAGGGTTGCAGTTTGGTTAGGAGTGGAATATTTGTTTGTTAATGATG
TCTTCAGTTCTGGTACCTCTGTTTTACTTTCTTATGCTCTTTGGAACTTTTGTCAAAAT
TTAAGCCTGGGTTCTAGATAATACCAGATCTACCTAAACCTCAAGTCTATGTTAAAGTTG
[A,C]
TTTCTGCTGTTAAATAAGCTATGATTTAAGATATTCTGACTGCTCCAGTGTCAAGGG
ACCTTCTGGGAGCAGGTGCTAACATAGTGTTCAGAATCAATATGTGAGATGAAAAGGATC
CCCTCCAGGAGGATCCTGAGCTGTTCAAAATCATTTAAGTTTACAGCGTTGTTCCCTTT
GGCTTTGAGTCGTTTTACTCAAGTAGCCAGAAACACCCACGTTTCTGAATTTGTTTA
AACTGTAAACAATAAGTAAATAGAATGCATGAAAGATATTCTGGCGATTGTAACCTAGA

FIGURE 3-59

- 138022 GAAAGCTCTCAGTTTGAGGACCCAAAATAAAACCAAAGTCATGCCATGACCCATACTCAT
TTACAAAAACAAGAACACTTTCTCTATCCCTAAAATTATGCTTTAGTACTTGAGGCCTT
TAAAAGTTAGTGCTTTTGATTGTGAAGACATTGAGCAACTTACTTTGTCATACATGCAGT
TGCACCTTACCACCTCTAATAGTGTATATTTATATTCAGGGGACTTAGATAATTTGCC
TGTGGATGGTCTTTTGACAGGAAAAAATCTACATTTTGACCATACTACCCCTTTCATGT
[T, C]
CTTATTATAAGCTTTTAGAAAATGATTTTCATTTCAGTCATGTCCAGTTATATAAAACGTTA
CTTTCTCATTTTGTAGAAGTTCAACAAAACATACTACTAAGACCAATCATCAAACCCACT
ATTATAAATGTTAATTTTGGCTGGGTAAAGTGGCTTGCGCCTATAATCCAGCACTTTGG
GAGGCTGAGGAGGGAAGATTGCTTGAGCCAGGAGTTTGAGACCAGCCTGGGCAACATAG
CAAGATCCTGTCTCTACTAAAAATAAAAAAAAAAATTAGGCCAAGCATAGTGGCTCATGC
- 138543 GACCAGCCTGGGCAACATAGCAAGATCCTGTCTCTACTAAAAATAAAAAAAAAAATTAGG
CCAAGCATAGTGGCTCATGCCGTGTAATCCTAGCACTTTGGTAGTCCAAGGCAGGGGGATC
ACTTGAGCCAGAAGTTCAAGACCAGCTTGGGTAAACATAATGAGACCCCTGTGTCTACAAA
AAATTTAAAAATTAGCCAGGCATGATGGTGCCCACTGTAGCCCCAGCTACTCAGAGGCT
GAGGTAGTGAAGGATTGCTTGAGCCTAAGAGATGGAGGCTGCAGTGAGCTATGCCACTG
[A, T]
ACTCTAGCCTGTTCAACTGAGCAGAACCCTGTCTGTAAAAGAAAATCAAAAACAAAAAT
AAATGTTAAATTTTGTTTTAAAGTTTGTAGCACAGACTCCCTCAAAACACCTTCTCCCAA
TTTTACAGAAAAGTAATTCAAAAATGAAAACCTTACTCTGTAAAGACCTCTACAGTGTTTT
TCTTTTCAAAATTTGGCTGATTTTAGGAAAAAAGTGATCATCTGAACTAAAAGAAATTG
CTTGGTTAGTTTCATATTAAAAACAGCAGTGACAAGTATATATAACTTAGATCTCAGCAT
- 138681 AAGACCAGCTTGGGTAACATAATGAGACCCCTGTGTCTACAAAAAATTTAAAAATTAGCCA
GGCATGATGGTGCCCACTGTAGCCCACTACTCAGAGGCTGAGGTAGTGAAGGATTG
CTTGAGCCTAAGAGATGGAGGCTGCAGTGAGCTATGCCACTGTACTCTAGCCTGTTCAAC
TGAGCAGAACCTGTCTGTAAAAGAAAATCAAAAACAAAAATAAATGTTAAATTTTGT
TTAAGTTTGTAGCAGACTCCCTCAAAACACCTTCTCCCAATTTTACAGAAAGTAATT
[C, T, G, A]
AAAAATGAAAACCTTACTCTGTAAAGACCTCTACAGTGTTTTCTTTTCAAAATTTGGCT
GATTTTAGGAAAAAAGTGATCATCTGAACTAAAAGAAATTGCTTGGTTAGTTTCATAT
TAAACAGCAGTGACAAGTATATATAACTTAGATCTCAGCATATGTGTTGTATATTTAA
CTTCACATATGTAGTTTTCAGTTAATGGAATGAATCAAACCTGGATCTATAACACTGAAA
AAGTTCTATTGTAATAGACTCATACGGAGAATACTCTGCTATAATAATATAAAATTAAGA

FIGURE 3-60